FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO POTAC, LLC

AUTHORIZING THE OPERATION OF POTAC

Corpus Christi Facility

Petroleum Refineries

LOCATED AT

Nueces County, Texas Latitude 27° 48' 56" Longitude 97° 29' 25" Regulated Entity Number: RN100214188

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:	O2089	Issuance Date: _	
For the Co	nmission		

Table of Contents

General Terms and Conditions 1 Special Terms and Conditions: 1 Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. 1 Additional Monitoring Requirements 8 New Source Review Authorization Requirements 9 Compliance Requirements 9 Protection of Stratospheric Ozone 10 Permit Location 10 Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82 Appendix B 83	Section	Page
Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting	General Terms and Conditions	1
and Reporting 1 Additional Monitoring Requirements 8 New Source Review Authorization Requirements 9 Compliance Requirements 9 Protection of Stratospheric Ozone 10 Permit Location 10 Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82	·	1
Additional Monitoring Requirements 8 New Source Review Authorization Requirements 9 Compliance Requirements 9 Protection of Stratospheric Ozone 10 Permit Location 10 Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82		4
New Source Review Authorization Requirements 9 Compliance Requirements 9 Protection of Stratospheric Ozone 10 Permit Location 10 Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82		
Compliance Requirements 9 Protection of Stratospheric Ozone 10 Permit Location 10 Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82	y ,	
Protection of Stratospheric Ozone 10 Permit Location 10 Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82	·	
Permit Location 10 Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82		
Permit Shield (30 TAC § 122.148) 10 Attachments 11 Applicable Requirements Summary 12 Additional Monitoring Requirements 41 Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82	·	
Applicable Requirements Summary		
Additional Monitoring Requirements	Attachments	11
Permit Shield 67 New Source Review Authorization References 74 Appendix A 81 Acronym List 82		
New Source Review Authorization References	Additional Monitoring Requirements	41
Appendix A	Permit Shield	67
Acronym List82	New Source Review Authorization References	74
Acronym List82	Appendix A	81
Appendix B83		
	Appendix B	83

General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart Y as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.300 which incorporates the 40 CFR Part 63 Subpart by reference.
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
 - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive

ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity

requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
 - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3)Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to

condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
 - (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's

eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - However, if visible emissions are present during the observation, (b) the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $\left[h_e/H_e\right]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

- (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
- (ii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: "Storage of Volatile Organic Compounds," the permit holder shall comply with the requirements of 30 TAC § 115.112(b)(1).
- 5. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter D requirements:
 - A. Title 30 TAC § 115.312(b)(1) (relating to Control Requirements), for emissions during Process Unit Shutdown or Turnaround
- 6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 7. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
 - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
 - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
 - D. Title 40 CFR § 61.10 (relating to Source Reporting and Reguest Waiver)
 - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
 - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
 - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
 - H. Title 40 CFR § 61.15 (relating to Modification)
 - I. Title 40 CFR § 61.19 (relating to Circumvention)

- 8. For facilities where total annual benzene quantity from waste is less than 1 megagram per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(5)(i) (ii), (a)(6), (b), and (c)(1) (3) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures
 - B. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
 - C. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
 - D. Title 40 CFR § 61.357(a), and (b) (relating to Reporting Requirements)
- 9. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 10. For the operations pertaining to the loading and unloading of marine tank vessels specified in 40 CFR Part 63, Subpart Y, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.300 incorporated by reference):
 - A. Title 40 CFR § 63.560(c) (relating to Designation of Affected Source), for applicability of the General Provisions of Subpart A
 - B. Title 40 CFR § 63.563(a)(4) (relating to Compliance and Performance Testing), for vapor tightness requirements of the marine vessels
 - C. Title 40 CFR § 63.564(a)(1) and (d) (relating to Monitoring Requirements)
 - D. Title 40 CFR § 63.565(a) (relating to Test Methods and Procedures), for performance testing requirements
 - E. Title 40 CFR § 63.565(c) (relating to Test Methods and Procedures), for vapor tightness requirements of the marine vessels
 - F. Title 40 CFR § 63.566 (relating to Construction and Reconstruction)
 - G. Title 40 CFR § 63.567(a) (b) and (h) (i) (relating to Reporting and Recordkeeping Requirements)

Additional Monitoring Requirements

11. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 12. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 13. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 14. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

- 15. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 16. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
- (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

- 17. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

18. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

19. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Unit Summary	1	3
Applicable Requirements Summary	1	8

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
BARGEDOCK	LOADING/UNLOADING OPERATIONS	N/A	63Y-1	40 CFR Part 63, Subpart Y	Material Loaded = Crude oil., Throughput = Source with throughput less than 10 M barrels and 200 M barrels.
BARGEDOCK	LOADING/UNLOADING OPERATIONS	N/A	63Y-2	40 CFR Part 63, Subpart Y	Material Loaded = Material other than crude oil or gasoline.
FLARE	FLARES	N/A	R1111-FLARE	30 TAC Chapter 111, Visible Emissions	No changing attributes.
FUGITIVES	FUGITIVE EMISSION N/A UNITS		R5322-ALL	30 TAC Chapter 115, Fugitives Pet Ref B Counties	No changing attributes.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	60GGG-ALL	40 CFR Part 60, Subpart GGG	No changing attributes.
FUGITIVES	FUGITIVE EMISSION UNITS	N/A	60GGGa	40 CFR Part 60, Subpart GGGa	No changing attributes.
GRPHOHTR	FCCU CAT REGEN/FUEL GAS COMBUSTION/CLAUS SRU	STACK-2A, STACK- 2B	60Ja-2	40 CFR Part 60, Subpart Ja	No changing attributes.
GRPTK1	STORAGE TANKS/VESSELS	TK701, TK702, TK703, TK704, TK705, TK706, TK707, TK708, TK709, TK710, TK711, TK712	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPTK1 STORAGE TANKS/VESSELS		TK701, TK702, TK703, TK704, TK705, TK706, TK707, TK708, TK709, TK710, TK711, TK712	60KB-1	40 CFR Part 60, Subpart Kb	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPTK2	STORAGE TANKS/VESSELS	TK717, TK718, TK719, TK720, TK721, TK722, TK723, TK724	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPTK2	STORAGE TANKS/VESSELS	TK717, TK718, TK719, TK720, TK721, TK722, TK723, TK724	60KB-1	40 CFR Part 60, Subpart Kb	No changing attributes.
GRPTK3	STORAGE TANKS/VESSELS	TK715, TK716	R5112-2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPTK3	STORAGE TANKS/VESSELS	TK715, TK716	60KB-1	40 CFR Part 60, Subpart Kb	No changing attributes.
MARINEFUG	FUGITIVE EMISSION UNITS	N/A	60GGGa	40 CFR Part 60, Subpart GGGa	No changing attributes.
MVC001	LOADING/UNLOADING OPERATIONS	N/A	63Y-1	40 CFR Part 63, Subpart Y	Material Loaded = Crude oil., Throughput = Source with throughput less than 10 M barrels and 200 M barrels.
MVC001	LOADING/UNLOADING OPERATIONS	N/A	63Y-2	40 CFR Part 63, Subpart Y	Material Loaded = Material other than crude oil or gasoline.
RC-1	C-1 LOADING/UNLOADING OPERATIONS		R5115-RC1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
RC-2	LOADING/UNLOADING OPERATIONS	N/A	R5115-RC2	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
RC-3	LOADING/UNLOADING OPERATIONS	N/A	R5115-RC3	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
RC-4	LOADING/UNLOADING OPERATIONS	N/A	R5115-RC4	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
SC-1	LOADING/UNLOADING OPERATIONS	N/A	R5115-SC1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
SC-2	LOADING/UNLOADING OPERATIONS	N/A	R5115-SC2	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
SC-3	LOADING/UNLOADING OPERATIONS	N/A	R5115-SC3	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
SC-4	LOADING/UNLOADING OPERATIONS	N/A	R5115-SC4	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
TK01	ASPHALT OPERATIONS	N/A	60UU-TK01	40 CFR Part 60, Subpart UU	No changing attributes.
TK02	ASPHALT OPERATIONS	N/A	60UU-TK02	40 CFR Part 60, Subpart UU	No changing attributes.
TK03	ASPHALT OPERATIONS	N/A	60UU-TK03	40 CFR Part 60, Subpart UU	No changing attributes.
TK04	ASPHALT OPERATIONS	N/A	60UU-TK04	40 CFR Part 60, Subpart UU	No changing attributes.
TK05	ASPHALT OPERATIONS	N/A	60UU-TK05	40 CFR Part 60, Subpart UU	No changing attributes.
TK06	ASPHALT OPERATIONS	N/A	60UU-TK06	40 CFR Part 60, Subpart UU	No changing attributes.
TK07	ASPHALT OPERATIONS	N/A	60UU-TK07	40 CFR Part 60, Subpart UU	No changing attributes.
TK22	ASPHALT OPERATIONS	N/A	60UU-TK22	40 CFR Part 60, Subpart UU	No changing attributes.
TK24	ASPHALT OPERATIONS	N/A	60UU-TK24	40 CFR Part 60, Subpart UU	No changing attributes.
TK25	ASPHALT OPERATIONS	N/A	60UU-TK25	40 CFR Part 60, Subpart UU	No changing attributes.
TK26	ASPHALT OPERATIONS	N/A	60UU-TK26	40 CFR Part 60, Subpart UU	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
TK301	STORAGE TANKS/VESSELS	N/A	R5112-TK301	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK301	STORAGE TANKS/VESSELS	N/A	60KA-TK301	40 CFR Part 60, Subpart Ka	No changing attributes.
TK302	STORAGE TANKS/VESSELS	N/A	R5112-TK302	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK302	STORAGE TANKS/VESSELS	N/A	60KA-TK302	40 CFR Part 60, Subpart Ka	No changing attributes.
TK303	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK303	STORAGE TANKS/VESSELS	N/A	60KB-1	40 CFR Part 60, Subpart Kb	No changing attributes.
TK303	ASPHALT OPERATIONS	N/A	60UU-TK303	40 CFR Part 60, Subpart UU	No changing attributes.
TK304	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK304	STORAGE TANKS/VESSELS	N/A	60KB-1	40 CFR Part 60, Subpart Kb	No changing attributes.
TK304	ASPHALT OPERATIONS	N/A	60UU-TK304	40 CFR Part 60, Subpart UU	No changing attributes.
TK305	STORAGE TANKS/VESSELS	N/A	60KA-TK305	40 CFR Part 60, Subpart Ka	No changing attributes.
TK306	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK306	STORAGE TANKS/VESSELS	N/A	60KB-1	40 CFR Part 60, Subpart Kb	No changing attributes.
TK307	STORAGE TANKS/VESSELS	N/A	60KA-TK307	40 CFR Part 60, Subpart Ka	No changing attributes.

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
TK311	STORAGE TANKS/VESSELS	N/A	R5112-TK311C	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TK311	STORAGE TANKS/VESSELS	N/A	60KB-TK311	40 CFR Part 60, Subpart Kb	No changing attributes.
TK312	ASPHALT OPERATIONS	N/A	60UU-TK312	40 CFR Part 60, Subpart UU	No changing attributes.
TK313	ASPHALT OPERATIONS	N/A	60UU-TK313	40 CFR Part 60, Subpart UU	No changing attributes.
TK314	ASPHALT OPERATIONS	N/A	60UU-TK314	40 CFR Part 60, Subpart UU	No changing attributes.
TK315	ASPHALT OPERATIONS	N/A	60UU-TK315	40 CFR Part 60, Subpart UU	No changing attributes.
TK316	ASPHALT OPERATIONS	N/A	60UU-TK316	40 CFR Part 60, Subpart UU	No changing attributes.
TRUCKRACK	LOADING/UNLOADING OPERATIONS	N/A	R115- TRUCKRACK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
WASTEWATER	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131- WASTWATE	30 TAC Chapter 115, Water Separation	No changing attributes.

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BARGEDOCK	EU	63Y-1	Exempt	40 CFR Part 63, Subpart Y	§ 63.560(a)(2) § 153.282 § 63.560(a)(4)	Existing sources with emissions less than 10 and 25 tons must meet the submerged fill standards of 46 CFR 153.282. This submerged fill requirement does not apply to petroleum refineries.	§ 63.565(I)	§ 63.567(j)(4)	None
BARGEDOCK	EU	63Y-2	Exempt	40 CFR Part 63, Subpart Y	§ 63.560(a)(2) § 153.282 § 63.560(a)(4)	Existing sources with emissions less than 10 and 25 tons must meet the submerged fill standards of 46 CFR 153.282. This submerged fill requirement does not apply to petroleum refineries.	§ 63.565(I)	§ 63.567(j)(4)	None
FLARE	EU	R1111- FLARE	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.327(1)	Valves of nominal size of 2" (5 cm) or less are exempt, provided allowable emissions from sources affected by this division after controls are applied with exemptions will not exceed by more than 5.0% such allowable emissions with no exemptions.	None	None	§ 115.327(1)(A) § 115.327(1)(B) § 115.327(1)(C)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5322-ALL	voc	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.327(3)	No pump seal, as described in § 115.327(3) or (5), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3)	No pump seal may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324 § 115.324(1) § 115.324(1)(A) § 115.324(3) § 115.324(4) § 115.324(6) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.322(4) § 115.327(5)	No valve (gaseous service), as described in § 115.327(3) or (5), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.322(4) § 115.322(5)	No valve (gaseous service) may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324 § 115.324(2) § 115.324(2)(B) § 115.324(4) § 115.324(6) [G]§ 115.324(7) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.324(7) [G]§ 115.326(1) § 115.327(4)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5322-ALL	voc	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.322(4) § 115.327(3) § 115.327(5)	No valve in liquid service, as described in § 115.327(3) or (5), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.322(4)	No valve in liquid service may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324 § 115.324(1) § 115.324(1)(B) § 115.324(4) § 115.324(6) [G]§ 115.324(7) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.324(7) [G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.327(3)	No process drain, as described in § 115.327(3) or (5), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3)	No process drain may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324 § 115.324(1) § 115.324(1)(C) § 115.324(4) § 115.324(6) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5322-ALL	voc	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.327(3) § 115.327(6)	No compressor seal, as described in § 115.327(3), (5) or (6), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3)	No compressor seal may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324 § 115.324(2) § 115.324(2)(A) § 115.324(4) § 115.324(6) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.322(4) § 115.327(3) § 115.327(5)	No elevated valve, as described in § 115.327(3) or (5), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.322(4)	No elevated valve may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324 § 115.324(1) § 115.324(1)(D) § 115.324(4) § 115.324(6) [G]§ 115.324(7) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.324(7) [G]§ 115.326(1) § 115.327(4)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.327(5)	No pressure relief valve in gaseous service, as described in § 115.327(3) or (5), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.322(5)	No pressure relief valve in gaseous service may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324 § 115.324(2) § 115.324(2)(C) § 115.324(4) § 115.324(5) § 115.324(6) [G]§ 115.324(7) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.324(7) [G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3) § 115.327(3)	No connector, as described in § 115.327(3) or (5), may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	[G]§ 115.325	[G]§ 115.326(1) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	R5322-ALL	VOC	30 TAC Chapter 115, Fugitives Pet Ref B Counties	§ 115.322(1) § 115.322(2) § 115.322(3)	No connector may be allowed to have a VOC leak as defined in §101.1 for more than 15 calendar days after the leak is found, except as provided in §115.322(2).	§ 115.324(4) § 115.324(6) [G]§ 115.325	[G]§ 115.326(1) [G]§ 115.326(2) [G]§ 115.326(3) § 115.326(5)	[G]§ 115.326(1) § 115.327(4)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(d)	Comply with the requirements as stated in §60.482-1(d) for equipment in vacuum service.	None	§ 60.486(e) § 60.486(e)(1) § 60.486(e)(5)	None

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-2 [G]§ 60.482-9	Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service.	[G]§ 60.482-2 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.592(d) § 60.593(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	\$ 60.592(a) \$ 60.482-1(a) \$ 60.482-1(b) \$ 60.482-3(f) \$ 60.482-3(g)(1) \$ 60.482-3(g)(2) [G]\$ 60.482-3(i) \$ 60.482-3(j) [G]\$ 60.482-9 \$ 60.593(c)	Comply with the requirements as stated in §60.482-3 for reciprocating compressors that become subject under §60.14 and §60.15.	§ 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) [G]§ 60.482-3(i) § 60.482-3(j) § 60.485(a) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-3 [G]§ 60.482-9	Comply with the requirements as stated in §60.482-3 for compressors.	[G]§ 60.482-3 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-4 [G]§ 60.482-9	Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service.	[G]§ 60.482-4 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-5 [G]§ 60.482-9	Comply with the requirements in as stated in §60.482-5 for sampling connection systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-6 [G]§ 60.482-9	Comply with the requirements in as stated in §60.482-6 for openended valves and lines.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-7 [G]§ 60.482-9 [G]§ 60.483-1 [G]§ 60.483-2 § 60.592(b)	Comply with the requirements in as stated in §60.482-7 for valves in gas/vapor or light-liquid service.	[G]§ 60.482-7 [G]§ 60.483-1 [G]§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.592(d) § 60.593(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(g) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(d) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-8 [G]§ 60.482-9	Comply with the requirements in as stated in §60.482-8 for pumps in heavy-liquid service.	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-8 [G]§ 60.482-9	Comply with the requirements in as stated in §60.482-8 for valves in heavy-liquid service.	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-8 [G]§ 60.482-9	Comply with the requirements in as stated in §60.482-8 for flanges or other connectors.	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGG- ALL	VOC	40 CFR Part 60, Subpart GGG	§ 60.592(a) § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-8 [G]§ 60.482-9	Comply with the requirements in as stated in §60.482-8 for pressure relief devices in light-liquid service.	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.592(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.592(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.592(e)
FUGITIVES	EU	60GGGa	VOC	40 CFR Part 60, Subpart GGGa	[G]§ 60.590a(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart GGGa
GRPHOHTR	EU	60Ja-2	§111 Pollutant	40 CFR Part 60, Subpart Ja	§ 60.100a(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart Ja	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart Ja

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPTK1	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.114(b)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(1)(A) [G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(1)(B)
GRPTK1	EU	60KB-1	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	\$ 60.113b(a)(1) \$ 60.113b(a)(2) \$ 60.113b(a)(4) \$ 60.113b(a)(5) \$ 60.116b(a) \$ 60.116b(b) \$ 60.116b(c) \$ 60.116b(e) \$ 60.116b(e)(1) \$ 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
GRPTK2	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.114(b)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(1)(A) [G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(1)(B)
GRPTK2	EU	60KB-1	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) § 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPTK3	EU	R5112-2	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.114(b)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(1)(A) [G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(1)(B)
GRPTK3	EU	60KB-1	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	\$ 60.113b(a)(1) \$ 60.113b(a)(2) \$ 60.113b(a)(4) \$ 60.113b(a)(5) \$ 60.116b(a) \$ 60.116b(c) \$ 60.116b(e) \$ 60.116b(e)(1) \$ 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
MARINEFUG	EU	60GGGa	VOC	40 CFR Part 60, Subpart GGGa	[G]§ 60.590a(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart GGGa	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart GGGa

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
MVC001	EU	63Y-1	112(B) HAPS	40 CFR Part 63, Subpart Y	§ 63.562(b) [G]§ 63.562(b)(1) § 63.562(b)(3) [G]§ 63.562(b)(6) § 63.562(e) § 63.562(e)(1) [G]§ 63.562(e)(2) [G]§ 63.562(e)(3) § 63.562(e)(4) § 63.562(e)(5) § 63.562(e)(5) § 63.562(e)(7) [G]§ 63.562(e)(7) [G]§ 63.562(e)(7)(ii) § 63.562(e)(7)(ii) § 63.563(a)(2) § 63.563(a)(3)	Marine tank vessel loading operations shall apply MACT standards, except for the VMT source.	[G]§ 63.562(b)(6) [G]§ 63.562(e)(7)(i) § 63.562(e)(7)(ii) § 63.563(b) § 63.563(b)(1) § 63.563(b)(1) § 63.563(b)(4) § 63.563(b)(4)(ii) [G]§ 63.563(c) § 63.563(c) § 63.564(a)(2) § 63.564(a)(2) § 63.564(a)(4) § 63.564(e)(2) § 63.564(e)(4) [G]§ 63.565(b) [G]§ 63.565(f) § 63.565(f) § 63.565(f)(1)	[G]§ 63.562(b)(6) § 63.562(e)(5) [G]§ 63.562(e)(7)(ii) § 63.562(e)(7)(iii) § 63.564(e)(2) [G]§ 63.565(d) § 63.567(f) [G]§ 63.567(g) § 63.567(j)(1) § 63.567(j)(2) [G]§ 63.567(k)	[G]§ 63.562(b)(6) § 63.562(e)(7)(ii) § 63.567(b)(5)(ii) § 63.567(c) § 63.567(e)(1) [G]§ 63.567(e)(2) § 63.567(e)(3) § 63.567(e)(4) § 63.567(e)(6) § 63.567(f) § 63.567(f) § 63.567(f) § 63.567(m) § 63.567(m) § 63.567(n)(1) § 63.567(n)(2)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
MVC001	EU	63Y-2	112(B) HAPS	40 CFR Part 63, Subpart Y	§ 63.562(b) [G]§ 63.562(b)(1) § 63.562(b)(3) [G]§ 63.562(b)(6) § 63.562(e) § 63.562(e)(1) [G]§ 63.562(e)(2) [G]§ 63.562(e)(3) § 63.562(e)(4) § 63.562(e)(5) § 63.562(e)(6) § 63.562(e)(7) [G]§ 63.562(e)(7)(i) § 63.562(e)(7)(ii) § 63.563(a)(2) § 63.563(a)(3)	Marine tank vessel loading operations shall apply MACT standards, except for the VMT source.	[G]§ 63.562(b)(6) [G]§ 63.562(e)(7)(i) § 63.562(e)(7)(ii) § 63.563(b) § 63.563(b)(1) § 63.563(b)(3) § 63.563(b)(4) § 63.563(b)(4)(ii) [G]§ 63.563(c) § 63.564(a)(2) § 63.564(a)(2) § 63.564(a)(4) § 63.564(e)(2) § 63.564(e)(2) § 63.564(e)(4) [G]§ 63.564(e)(4) [G]§ 63.565(b) [G]§ 63.565(f) § 63.565(f) § 63.565(f)(1) § 63.565(f)(1)	[G]§ 63.562(b)(6) § 63.562(e)(5) [G]§ 63.562(e)(7)(i) § 63.562(e)(7)(ii) § 63.564(e)(2) [G]§ 63.565(d) § 63.567(f) [G]§ 63.567(g) § 63.567(j)(1) § 63.567(j)(2) [G]§ 63.567(k)	[G]§ 63.562(b)(6) § 63.562(e)(7)(ii) § 63.567(b)(5)(ii) § 63.567(c) § 63.567(e)(1) [G]§ 63.567(e)(2) § 63.567(e)(3) § 63.567(e)(4) § 63.567(e)(5) § 63.567(e)(6) § 63.567(f) § 63.567(f) § 63.567(m) § 63.567(n)(1) § 63.567(n)(2)
RC-1	EU	R5115-RC1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
RC-2	EU	R5115-RC2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
RC-3	EU	R5115-RC3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
RC-4	EU	R5115-RC4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
SC-1	EU	R5115-SC1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
SC-2	EU	R5115-SC2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
SC-3	EU	R5115-SC3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
SC-4	EU	R5115-SC4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
TK01	EU	60UU-TK01	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK02	EU	60UU-TK02	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK03	EU	60UU-TK03	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK04	EU	60UU-TK04	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK05	EU	60UU-TK05	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK06	EU	60UU-TK06	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK07	EU	60UU-TK07	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK22	EU	60UU-TK22	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK24	EU	60UU-TK24	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK25	EU	60UU-TK25	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK26	EU	60UU-TK26	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK301	EU	R5112- TK301	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.112(b)(2)(F) § 115.114(b)(2)(A) § 115.114(b)(4)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(2) § 115.114(b)(3) § 115.114(b)(4) § 115.114(b)(4)(A) [G]§ 115.117	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(2)(B) § 115.114(b)(4)(B)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK301	EU	60KA- TK301	VOC	40 CFR Part 60, Subpart Ka	§ 60.112a(a)(1) § 60.112a(a)(1)(i) § 60.112a(a)(1)(i)(A) § 60.112a(a)(1)(i)(D) § 60.112a(a)(1)(ii)(A) § 60.112a(a)(1)(ii)(B) § 60.112a(a)(1)(ii)(C) § 60.112a(a)(1)(ii)(D) § 60.112a(a)(1)(ii)(D) § 60.112a(a)(1)(iii) § 60.112a(a)(1)(iii)	Vessels storing petroleum liquids with a TVP > 10.3 kPa (1.5 psia) but < 76.6 kPa (11.1 psia) shall be equipped with an external floating roof and closure device as specified.	§ 60.113a(a)(1) § 60.113a(a)(1)(i) § 60.113a(a)(1)(i)(A) § 60.113a(a)(1)(i)(B) § 60.113a(a)(1)(i)(D) § 60.113a(a)(1)(i)(D) § 60.113a(a)(1)(ii)(A) § 60.113a(a)(1)(ii)(A) § 60.113a(a)(1)(ii)(B) § 60.113a(a)(1)(iii)(C) § 60.113a(a)(1)(iii) § 60.113a(a)(1)(iii) § 60.113a(a)(1)(iii) § 60.113a(a)(1)(iii) § 60.115a(a) § 60.115a(b)	§ 60.113a(a)(1)(i)(D) § 60.115a(a)	§ 60.113a(a)(1)(i)(E) § 60.113a(a)(1)(iv)
TK302	EU	R5112- TK302	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.112(b)(2)(F) § 115.114(b)(2)(A) § 115.114(b)(4)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(2) § 115.114(b)(3) § 115.114(b)(4) § 115.114(b)(4)(A) [G]§ 115.117	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(2)(B) § 115.114(b)(4)(B)
TK302	EU	60KA- TK302	VOC	40 CFR Part 60, Subpart Ka	§ 60.112a(a)(1) § 60.112a(a)(1)(i) § 60.112a(a)(1)(i)(A) § 60.112a(a)(1)(i)(D) § 60.112a(a)(1)(ii)(A) § 60.112a(a)(1)(ii)(B) § 60.112a(a)(1)(ii)(C) § 60.112a(a)(1)(ii)(D) § 60.112a(a)(1)(iii)(D) § 60.112a(a)(1)(iii) § 60.112a(a)(1)(iv)	Vessels storing petroleum liquids with a TVP > 10.3 kPa (1.5 psia) but < 76.6 kPa (11.1 psia) shall be equipped with an external floating roof and closure device as specified.	\$ 60.113a(a)(1) \$ 60.113a(a)(1)(i) \$ 60.113a(a)(1)(i)(A) \$ 60.113a(a)(1)(i)(D) \$ 60.113a(a)(1)(i)(D) \$ 60.113a(a)(1)(i)(E) \$ 60.113a(a)(1)(ii)(A) \$ 60.113a(a)(1)(ii)(B) \$ 60.113a(a)(1)(ii)(C) \$ 60.113a(a)(1)(iii) \$ 60.113a(a)(1)(iv) \$ 60.113a(a)(1)(iv) \$ 60.115a(a) \$ 60.115a(b)	§ 60.113a(a)(1)(i)(D) § 60.115a(a)	§ 60.113a(a)(1)(i)(E) § 60.113a(a)(1)(iv)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK303	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.114(b)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(1)(A) [G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(1)(B)
TK303	EU	60KB-1	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	\$ 60.113b(a)(1) \$ 60.113b(a)(2) \$ 60.113b(a)(4) \$ 60.113b(a)(5) \$ 60.116b(a) \$ 60.116b(b) \$ 60.116b(c) \$ 60.116b(e) \$ 60.116b(e)(1) \$ 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
TK303	EU	60UU- TK303	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK304	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.114(b)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(1)(A) [G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(1)(B)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK304	EU	60KB-1	voc	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) § 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
TK304	EU	60UU- TK304	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK305	EU	60KA- TK305	VOC	40 CFR Part 60, Subpart Ka	§ 60.110a(a)	The affected facility is each storage vessel for petroleum liquids that has a storage capacity > 151,416 L (40,000 gal) and for which construction commenced after 5/18/78 and prior to 7/23/84.	§ 60.115a(a) § 60.115a(b)	§ 60.115a(a)	None
TK306	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.114(b)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(1)(A) [G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(1)(B)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK306	EU	60KB-1	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	\$ 60.113b(a)(1) \$ 60.113b(a)(2) \$ 60.113b(a)(4) \$ 60.113b(a)(5) \$ 60.116b(a) \$ 60.116b(b) \$ 60.116b(c) \$ 60.116b(e) \$ 60.116b(e)(1) \$ 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
TK307	EU	60KA- TK307	VOC	40 CFR Part 60, Subpart Ka	§ 60.110a(a)	The affected facility is each storage vessel for petroleum liquids that has a storage capacity > 151,416 L (40,000 gal) and for which construction commenced after 5/18/78 and prior to 7/23/84.	§ 60.115a(a) § 60.115a(b)	§ 60.115a(a)	None
TK311	EU	R5112- TK311C	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(b)(1) § 115.112(b)(2) § 115.112(b)(2)(A) § 115.112(b)(2)(B) § 115.112(b)(2)(C) § 115.112(b)(2)(D) § 115.112(b)(2)(E) § 115.114(b)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(b)(1)(A) [G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(b)(2) § 115.118(b)(4) § 115.118(b)(5)	§ 115.114(b)(1)(B)
TK311	EU	60KB- TK311	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) § 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK312	EU	60UU- TK312	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK313	EU	60UU- TK313	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK314	EU	60UU- TK314	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TK315	EU	60UU- TK315	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)

Unit Group Process ID No.	Unit Group Proces s Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
TK316	EU	60UU- TK316	PM (Opacity)	40 CFR Part 60, Subpart UU	§ 60.472(c)	Within 60 days of maximum production rate, but not later than 180 days after initial startup, asphalt storage tank exhaust gases shall not discharge opacity > 0%, except as specified.	§ 60.473(c) § 60.473(d) § 60.474(b) § 60.474(c)(5) ** See Periodic Monitoring Summary	§ 60.473(d)	§ 60.473(c) § 60.473(d)
TRUCKRACK	EU	R115- TRUCKRA CK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land- based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
WASTEWATE R	EU	R5131- WASTWAT E	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(b)(3)	Any separator which separates materials having a true vapor pressure < 1.5 psia (10.3 kPa) obtained from any equipment is exempt from §115.132(b).		§ 115.136(b)(1) § 115.136(b)(3) § 115.136(b)(4)	None

	A .1.1561.88 56	·	4	
	Additional Monitor			
Periodic Monitoring Summary				42

Unit/Group/Process Information						
ID No.: GRPTK1						
Control Device ID No.: N/A	Control Device Type: N/A					
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1					
Pollutant: VOC	Main Standard: § 115.112(b)(1)					
Monitoring Information						
Indicator: Internal Floating Roof						
Minimum Frequency: annually						
Averaging Period: n/a						
Deviation Limit: The roof is not floating on the surface	Deviation Limit: The roof is not floating on the surface of the VOC and, liquid has accumulated on the					

internal floating roof, the seals are detached, or there are holes or tears in the seal fabric.

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be considered and reported as a deviation.

Unit/Group/Process Information						
ID No.: GRPTK2						
Control Device ID No.: N/A	Control Device Type: N/A					
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1					
Pollutant: VOC	Main Standard: § 115.112(b)(1)					
Monitoring Information						
Indicator: Internal Floating Roof						
Minimum Frequency: annually						
Averaging Period: n/a						
Deviation Limit: The roof is not floating on the surface of the VOC and, liquid has accumulated on the						

internal floating roof, the seals are detached, or there are holes or tears in the seal fabric.

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any

monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be

considered and reported as a deviation.

Unit/Group/Process Information						
ID No.: GRPTK3						
Control Device ID No.: N/A	Control Device Type: N/A					
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-2					
Pollutant: VOC	Main Standard: § 115.112(b)(1)					
Monitoring Information						
Indicator: Internal Floating Roof						
Minimum Frequency: annually						
Averaging Period: n/a						
Deviation Limit: The roof is not floating on the surface of the VOC and, liquid has accumulated on the						

internal floating roof, the seals are detached, or there are holes or tears in the seal fabric.

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be considered and reported as a deviation.

Unit/Group/Process Information							
ID No.: TK01							
Control Device ID No.: N/A	Control Device Type: N/A						
Applicable Regulatory Requirement							
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK01						
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)						
Monitoring Information							
Indicator: Presence of visible emissions							
Minimum Frequency: Quarterly							
Averaging Period: Six minutes							
Deviation Limit: 0 % opacity	Deviation Limit: 0 % opacity						

Unit/Group/Process Information						
ID No.: TK02						
Control Device ID No.: N/A	Control Device Type: N/A					
Applicable Regulatory Requirement						
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK02					
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)					
Monitoring Information						
Indicator: Presence of visible emissions						
Minimum Frequency: Quarterly						
Averaging Period: Six minutes						
Deviation Limit: 0 % opacity						

Unit/Group/Process Information		
ID No.: TK03		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK03	
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)	
Monitoring Information		
Indicator: Presence of visible emissions		
Minimum Frequency: Quarterly		
Averaging Period: Six minutes		
Deviation Limit: 0 % opacity		

Unit/Group/Process Information	
ID No.: TK04	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK04
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)
Monitoring Information	
Indicator: Presence of visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: Six minutes	
Deviation Limit: 0 % opacity	

Unit/Group/Process Information	
ID No.: TK05	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK05
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)
Monitoring Information	
Indicator: Presence of visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: Six minutes	
Deviation Limit: 0 % opacity	

Unit/Group/Process Information		
ID No.: TK06		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK06	
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)	
Monitoring Information		
Indicator: Presence of visible emissions		
Minimum Frequency: Quarterly		
Averaging Period: Six minutes		
Deviation Limit: 0 % Opacity		

Unit/Group/Process Information		
ID No.: TK07		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK07	
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)	
Monitoring Information		
Indicator: Presence of visible emissions		
Minimum Frequency: Quarterly		
Averaging Period: Six minutes		
Deviation Limit: 0 % opacity		

Unit/Group/Process Information		
ID No.: TK22		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK22	
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)	
Monitoring Information		
Indicator: Presence of visible emissions		
Minimum Frequency: Quarterly		
Averaging Period: Six minutes		
Deviation Limit: 0 % opacity		

Unit/Group/Process Information		
ID No.: TK24		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK24	
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)	
Monitoring Information		
Indicator: Presence of visible emissions		
Minimum Frequency: Quarterly		
Averaging Period: Six minutes		
Deviation Limit: 0 % opacity		

Unit/Group/Process Information	
ID No.: TK25	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK25
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)
Monitoring Information	
Indicator: Presence of visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: Six Minutes	
Deviation Limit: 0% opacity	

Unit/Group/Process Information	
ID No.: TK26	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK26
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)
Monitoring Information	
Indicator: Presence of visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: Six minutes	
Deviation Limit: 0 % opacity	

Unit/Group/Process Information		
ID No.: TK303		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1	
Pollutant: VOC	Main Standard: § 115.112(b)(1)	
Monitoring Information		
Indicator: Internal Floating Roof		
Minimum Frequency: annually		
Averaging Period: n/a		
Deviation Limit: The roof is not floating on the surface of the VOC and, liquid has accumulated on the		

internal floating roof, the seals are detached, or there are holes or tears in the seal fabric.

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be considered and reported as a deviation.

Unit/Group/Process Information	
ID No.: TK303	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK303
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)
Monitoring Information	
Indicator: Presence of visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: Six minutes	
Deviation Limit: 0% opacity	

Unit/Group/Process Information		
ID No.: TK304		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1	
Pollutant: VOC	Main Standard: § 115.112(b)(1)	
Monitoring Information		
Indicator: Internal Floating Roof		
Minimum Frequency: annually		
Averaging Period: n/a		
Deviation Limit: The roof is not floating on the surface of the VOC and, liquid has accumulated on the		

internal floating roof, the seals are detached, or there are holes or tears in the seal fabric.

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be considered and reported as a deviation.

Unit/Group/Process Information				
Control Device Type: N/A				
SOP Index No.: 60UU-TK304				
Main Standard: § 60.472(c)				
Monitoring Information				

Unit/Group/Process Information				
ID No.: TK306				
Control Device ID No.: N/A	Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1			
Pollutant: VOC	Main Standard: § 115.112(b)(1)			
Monitoring Information				
Indicator: Internal Floating Roof				
Minimum Frequency: annually				
Averaging Period: n/a				
Deviation Limit: The roof is not floating on the surface of the VOC and, liquid has accumulated on the internal floating roof, the seals are detached, or there are holes or tears in the seal fabric.				

Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be considered and reported as a deviation.

Unit/Group/Process Information				
ID No.: TK311				
Control Device ID No.: N/A	No.: N/A Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-TK311C			
Pollutant: VOC	Main Standard: § 115.112(b)(1)			
Monitoring Information				
Indicator: Internal Floating Roof				
Minimum Frequency: annually				
Averaging Period: n/a				
Deviation Limit: Roof is not floating on the surface of the VOC and, liquid has accumulated on the internal floating roof, the seals are detached, or there are holes or tears in the seal fabric.				
Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any				

monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be

considered and reported as a deviation.

Unit/Group/Process Information				
ID No.: TK312				
Control Device ID No.: N/A	A Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK312			
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)			
Monitoring Information				
Indicator: Presence of visible emissions				
Minimum Frequency: Quarterly				
Averaging Period: Six minutes				
Deviation Limit: 0% opacity				

Unit/Group/Process Information				
ID No.: TK313				
Control Device ID No.: N/A	Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK313			
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)			
Monitoring Information				
Indicator: Presence of visible emissions				
Minimum Frequency: Quarterly				
Averaging Period: Six minutes				
Deviation Limit: 0% opacity				

Unit/Group/Process Information				
ID No.: TK314				
Control Device ID No.: N/A	Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK314			
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)			
Monitoring Information				
Indicator: Presence of visible emissions				
Minimum Frequency: Quarterly				
Averaging Period: Six minutes				
Deviation Limit: 0% opacity				

Unit/Group/Process Information				
ID No.: TK315				
Control Device ID No.: N/A	Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK315			
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)			
Monitoring Information				
Indicator: Presence of visible emissions				
Minimum Frequency: Quarterly				
Averaging Period: Six minutes				
Deviation Limit: 0% opacity				

Unit/Group/Process Information				
ID No.: TK316				
Control Device ID No.: N/A	Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 40 CFR Part 60, Subpart UU	SOP Index No.: 60UU-TK316			
Pollutant: PM (Opacity)	Main Standard: § 60.472(c)			
Monitoring Information				
Indicator: Presence of visible emissions				
Minimum Frequency: Quarterly				
Averaging Period: Six minutes				
Deviation Limit: 0% opacity				

	Permit Shield	
		_
Permit Shield		3

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Gr	oup/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
BARGEDOCK	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	All loading and unloading of marine vessels is exempt from this division
BOILER A	N/A	30 TAC Chapter 112, Sulfur Compounds	Does not fire liquid fuel.
BOILER A	N/A	40 CFR Part 60, Subpart D	Boiler heat duty is less than 250 MMBtu/hr.
BOILER A	N/A	40 CFR Part 60, Subpart Db	Boiler heat duty is less than 100 MMBtu/hr.
BOILER A	N/A	40 CFR Part 60, Subpart Dc	Boiler was constructed prior to June 9, 1989.
COOL TOWER	N/A	40 CFR Part 63, Subpart Q	The industrial process cooling tower has not been operated with chromium-based water treatment chemicals after 09/07/1994 and the application area is not considered a major source of HAPS.
FLARE	N/A	40 CFR Part 60, Subpart A	Flare not used to comply with other applicable NSPS requirements.
GRPHOHTR	STACK-2A, STACK-2B	30 TAC Chapter 112, Sulfur Compounds	Does not fire liquid fuel.
GRPHOHTR	STACK-2A, STACK-2B	40 CFR Part 63, Subpart DDDDD	Facility is not a major source of HAPS.
GRPTK4	TK713, TK714, TK725, TK726	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
GRPTK4	TK713, TK714, TK725, TK726	40 CFR Part 60, Subpart Kb	This subpart does not apply to storage vessels with a capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa).
GRPTK5	B-01, B-02, B-03, B-04, B-05, B-06	40 CFR Part 60, Subpart Kb	This subpart does not apply to pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Uni	t/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
HTR-01	N/A	30 TAC Chapter 112, Sulfur Compounds	Does not fire liquid fuel.
HTR-01	N/A	40 CFR Part 63, Subpart DDDDD	Facility is not a major source of HAPS
HTR-02	N/A	30 TAC Chapter 112, Sulfur Compounds	Does not fire liquid fuel.
HTR-02	N/A	40 CFR Part 63, Subpart DDDDD	Facility is not a major source of HAPS
PROCSHEATR	N/A	30 TAC Chapter 112, Sulfur Compounds	Does not fire liquid fuel.
PROCSHEATR	N/A	40 CFR Part 63, Subpart DDDDD	Facility is not a major source of HAPS
TK01	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK01	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK02	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK02	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK03	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK03	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK04	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK04	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Uni	t/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
TK05	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK05	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK06	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK06	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK07	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK07	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK22	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK22	N/A	40 CFR Part 60, Subpart Kb	Maximum true vapor pressure of material stored is less than 0.5 psia.
TK24	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK24	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK25	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK25	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit	/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
TK26	N/A	30 TAC Chapter 115, Storage of VOCs	Fixed roof tank that stores a material with a maximum true vapor less than 1.5 psia.
TK26	N/A	40 CFR Part 60, Subpart Kb	Storage vessel definition does not include process storage tanks.
TK301	N/A	40 CFR Part 60, Subpart UU	Storage tank does not store asphalt.
TK302	N/A	40 CFR Part 60, Subpart UU	Storage tank does not store asphalt.
TK305	N/A	30 TAC Chapter 115, Storage of VOCs	Internal floating roof with true vapor pressure of stored material less than 1.5 psia.
TK307	N/A	30 TAC Chapter 115, Storage of VOCs	Internal floating roof with true vapor pressure of stored material less than 1.5 psia.
TK308	N/A	30 TAC Chapter 115, Storage of VOCs	Internal floating roof with true vapor pressure of stored material less than 1.5 psia.
TK308	N/A	40 CFR Part 60, Subpart Ka	Although constructed in 1983 and not modified since, the true/reid vapor pressure of stored material is less than 1 psia.
TK309	N/A	30 TAC Chapter 115, Storage of VOCs	True vapor pressure of stored material is less than 1.0 psia.
TK309	N/A	40 CFR Part 60, Subpart Ka	Although constructed in 1983 and not modified since, the true/reid vapor pressure of stored material is less than 1 psia.
TK310	N/A	30 TAC Chapter 115, Storage of VOCs	True vaopr pressure of stored material is less than 1.0 psia.
TK310	N/A	40 CFR Part 60, Subpart Ka	Although constructed in 1983 and not modified since, the true/reid vapor pressure of stored material is less than 1 psia.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Un	it/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
TK312	N/A	30 TAC Chapter 115, Storage of VOCs	True vapor pressure of stored material is less than 1.0 psia.
TK312	N/A	40 CFR Part 60, Subpart Ka	Although constructed in 1983 and not modified since, the true/reid vapor pressure of stored material is less than 1 psia.
TK313	N/A	30 TAC Chapter 115, Storage of VOCs	True vapor pressure of stored material is less than 1.0 psia.
TK313	N/A	40 CFR Part 60, Subpart Ka	Although constructed in 1983 and not modified since, the true/reid vapor pressure of stored material is less than 1 psia.
TK314	N/A	30 TAC Chapter 115, Storage of VOCs	True vapor pressure of stored material is less than 1.0 psia.
TK314	N/A	40 CFR Part 60, Subpart Kb	Maximum true vapor pressure of material stored is less than 0.5 psia.
TK315	N/A	30 TAC Chapter 115, Storage of VOCs	True vapor pressure of stored materials is less thn 1.0 psia.
TK315	N/A	40 CFR Part 60, Subpart Kb	Maximum true vapor pressure of material stored is less than 0.5 psia.
TK316	N/A	30 TAC Chapter 115, Storage of VOCs	True vapor pressure of stored material is less than 1.0 psia.
TK316	N/A	40 CFR Part 60, Subpart Kb	Maximum true vapor pressure of material stored is less than 0.5 psia.
V-01	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity is less than 1,000 gallons.
V-01	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 19,800 gallons.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Gr	oup/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
V-02	N/A	30 TAC Chapter 115, Storage of VOCs	Storage capacity is less than 1,000 gallons.
V-02	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 19,800 gallons.
WASTEWATER	N/A	40 CFR Part 60, Subpart QQQ	The treatment facility was construction prior to the NSPS applicability date.
WASTEWATER	N/A	40 CFR Part 63, Subpart VV	The refinery does not control air emissions from an oil-water separator that another part of 40 CFR 60, 61, or 63 references.

New Source Review Authorization References

New Source Review Authorization References	75
New Source Review Authorization References by Emission Unit	76

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD)	Permits
PSD Permit No.: GHGPSDTX140	Issuance Date: 11/09/2016
PSD Permit No.: PSDTX963M1	Issuance Date: 09/01/2017
Title 30 TAC Chapter 116 Permits, Special Per By Rule, PSD Permits, or NA Permits) for the	rmits, and Other Authorizations (Other Than Permits Application Area.
Authorization No.: 9342A	Issuance Date: 11/09/2016
Authorization No.: 9343A	Issuance Date: 09/01/2017
Permits By Rule (30 TAC Chapter 106) for the	Application Area
Number: 106.472	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B-01	BULLET TANK 1	9342A, PSDTX963M1
B-02	BULLET TANK 2	9342A, PSDTX963M1
B-03	BULLET TANK 3	9342A, PSDTX963M1
B-04	BULLET TANK 4	9342A, PSDTX963M1
B-05	BULLET TANK 5	9342A, PSDTX963M1
B-06	BULLET TANK 6	9342A, PSDTX963M1
BARGEDOCK	BARGE LOADING DOCK	9342A, PSDTX963M1
BOILER A	BOILER A	9343A, GHGPSDTX140, PSDTX963M1
COOL TOWER	COOLING TOWER	9343A, GHGPSDTX140, PSDTX963M1
FLARE	PLANT FLARE	9343A, GHGPSDTX140, PSDTX963M1
FUGITIVES	EQUIPMENT FUGITIVES	9342A, 9343A, GHGPSDTX140, PSDTX963M1
HTR-01	HOT OIL HEATER 1	9343A, PSDTX963M1
HTR-02	HOT OIL HEATER 2	9343A, PSDTX963M1
MARINEFUG	MARINE LOADING FUGITIVES	9342A, GHGPSDTX140, PSDTX963M1
MVC001	MARINE LOADING DOCK	9342A, GHGPSDTX140, PSDTX963M1
PROCSHEATR	PROCESS HEATER	9343A, GHGPSDTX140, PSDTX963M1
RC-1	RAILCAR LOADING RACK 1	9342A, PSDTX963M1
RC-2	RAILCAR LOADING RACK 2	9342A, PSDTX963M1
RC-3	RAILCAR LOADING RACK 3	9342A, PSDTX963M1
RC-4	RAILCAR LOADING RACK 4	9342A, PSDTX963M1
SC-1	TRUCK LOADING RACK 1	9342A, PSDTX963M1

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
SC-2	TRUCK LOADING RACK 2	9342A, PSDTX963M1
SC-3	TRUCK LOADING RACK 3	9342A, PSDTX963M1
SC-4	TRUCK LOADING RACK 4	9342A, PSDTX963M1
STACK-2A	HOT OIL HEATER 1	9343A, GHGPSDTX140, PSDTX963M1
STACK-2B	HOT OIL HEATER 2	9343A, GHGPSDTX140, PSDTX963M1
TK01	ASPHALT/PMA TANK 1	9342A, PSDTX963M1
TK02	ASPHALT/PMA TANK 2	9342A, PSDTX963M1
TK03	ASPHALT/PMA TANK 3	9342A, PSDTX963M1
TK03	ASPHALT/PMA TANK3	9342A, PSDTX963M1
TK04	ASPHALT/PMA TANK 4	9342A, PSDTX963M1
TK05	ASPHALT/PMA TANK 5	9342A, PSDTX963M1
TK06	ASPHALT/PMA TANK 6	9342A, PSDTX963M1
TK07	ASPHALT/PMA TANK 7	9342A, PSDTX963M1
TK22	ASPHALT/ASPHALT MODIFIER TANK	106.472/09/04/2000
TK24	PMA LET DOWN TANK 1	9342A, PSDTX963M1
TK25	PMA LET DOWN TANK 2	9342A, PSDTX963M1
TK26	PMA WETTING TANK	9342A, PSDTX963M1
TK26	PMA WETTINGTANK	9342A, PSDTX963M1
TK301	TANK 301	9342A, PSDTX963M1
TK302	TANK 302	9342A, PSDTX963M1
TK303	TANK 303	9342A, PSDTX963M1

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK304	TANK 304	9342A, PSDTX963M1
TK305	TANK 305	9342A, PSDTX963M1
TK306	TANK 306	9342A, PSDTX963M1
TK307	TANK 307	9342A, PSDTX963M1
TK308	TANK 308	9342A, PSDTX963M1
TK309	TANK 309	9342A, PSDTX963M1
TK310	TANK 310	9342A, PSDTX963M1
TK311	TANK 311	9342A, PSDTX963M1
TK312	TANK 312	9342A, PSDTX963M1
TK313	TANK 313	9342A, PSDTX963M1
TK314	TANK 314	9342A, PSDTX963M1
TK315	TANK 315	9342A, PSDTX963M1
TK316	TANK 316	9342A, PSDTX963M1
TK701	TANKS 701	9342A, PSDTX963M1
TK702	TANK 702	9342A, PSDTX963M1
TK703	TANK 703	9342A, PSDTX963M1
TK704	TANK 704	9342A, PSDTX963M1
TK705	TANK 705	9342A, PSDTX963M1
TK706	TANK 706	9342A, PSDTX963M1
TK707	TANKS 707	9342A, PSDTX963M1
TK708	TANK 708	9342A, PSDTX963M1

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK709	TANK 709	9342A, PSDTX963M1
TK710	TANK 710	9342A, PSDTX963M1
TK711	TANK 711	9342A, PSDTX963M1
TK712	TANK 712	9342A, PSDTX963M1
TK713	TANK 713	9342A, PSDTX963M1
TK714	TANK 714	9342A, PSDTX963M1
TK715	TANK 715	9342A, PSDTX963M1
TK716	TANK 716	9342A, PSDTX963M1
TK717	TANK 717	9342A, PSDTX963M1
TK718	TANK 718	9342A, PSDTX963M1
TK719	TANK 719	9342A, PSDTX963M1
TK720	TANK 720	9342A, PSDTX963M1
TK721	TANK 721	9342A, PSDTX963M1
TK722	TANK 722	9342A, PSDTX963M1
TK723	TANK 723	9342A, PSDTX963M1
TK724	TANK 724	9342A, PSDTX963M1
TK725	TANK 725	9342A, PSDTX963M1
TK726	TANK 726	9342A, PSDTX963M1
TRUCKRACK	TRUCK LOADING RACK	9342A, PSDTX963M1
V-01	THERMAL FLUID EXPANSION TANK 1	106.472/09/04/2000
V-02	THERMAL FLUID EXPANSION TANK 2	106.472/09/04/2000

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
VC-1	VAPOR COMBUSTOR	9342A, PSDTX963M1
WASTEWATER	OILY WATER SEPARATOR	9343A, GHGPSDTX140, PSDTX963M1

	Appendix A	
Acronym List		82

Acronym List

The following abbreviations or acronyms may be used in this permit:

	actual cubic feet per minute
AMOC	alternate means of control
	Acid Rain Program
	American Society of Testing and Materials
	Beaumont/Port Arthur (nonattainment area)
	control device
	continuous emissions monitoring system
	continuous opacity monitoring system
	closed vent system
	emission point
EPA	U.S. Environmental Protection Agency
	emission unit
	Federal Clean Air Act Amendments
	federal operating permit
	grains per 100 standard cubic feet
	hazardous air pollutant
	Houston/Galveston/Brazoria (nonattainment area)
	hydrogen sulfide
	identification number
	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NADB	National Allowance Data Base
NADB NESHAP NO _x	
NADB NESHAP NO _x	
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) nitrogen oxides New Source Performance Standard (40 CFR Part 60) New Source Review Office of Regulatory Information Systems lead Permit By Rule Permit By Rule predictive emissions monitoring system particulate matter parts per million by volume process unit prevention of significant deterioration pounds per square inch absolute state implementation plan sulfur dioxide Texas Commission on Environmental Quality
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NADB	National Allowance Data Base National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)

Appendix B	
Major NSR Summary Table	84

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/2016			
Emission Point	Source Name(2)	Air Contaminant Name	Emission	Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements	
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.	
TK303	Tank 303	VOC	0.75	3.27	4, 11, 13, 30	4, 11, 12, 13, 30	4	
11303	TAIR 303	H_2S	< 0.01	0.01	4, 11, 13, 30	1, 11, 12, 10, 00	4	
TK304	Tank 304	VOC	0.42	1.86	4 44 42 20	4 44 40 40 00	4	
1 N 3 0 4	Tank 304	H₂S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4	
TK306	Tank 306	VOC	0.60	2.63	4, 11, 13, 30	11, 13, 30 4, 11, 12, 13, 30	4	
1 1 1 300	Tank 306	H ₂ S	< 0.01	0.01			4	
TK301	Tank 301	VOC	6.10	2.03	11, 13, 30	11, 12, 13, 30		
TK302	Tank 302	VOC	6.10	2.03	11, 13, 30	11, 12, 13, 30		
TK305	Tank 305	VOC	3.16	1.25	11, 13, 30	11, 12, 13, 30		
TK307	Tank 307	VOC	3.16	1.25	11, 13, 30	11, 12, 13, 30		
TK308	Tank 308	VOC	0.43	0.38	31	12, 31		
TK309	Tank 309	VOC	0.43	0.38	31	12, 31		
TK310	Tank 310	VOC	0.43	0.38	31	12, 31		
TK311	Tank 311	VOC	0.26	0.22	4, 31	4, 12, 31	4	

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/201	16	
Emission Point	Source Name(2)	Air Contaminant Name	Emission	n Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK312	Tank 312	VOC	1.09	2.44	31	12, 31	
TK313	Tank 313	VOC	1.09	2.44	31	12, 31	
TK314	Tank 314	VOC	0.61	1.37	31	12, 31	
TK315	Tank 315	VOC	0.61	1.37	31	12, 31	
TK316	Tank 316	VOC	1.09	2.44	31	12, 31	
B-01	Bullet Tank 1 (6)	VOC	_	_		GC7	
B-02	Bullet Tank 2 (6)	VOC	_	_		GC7	
B-03	Bullet Tank 3 (6)	VOC	_	_		GC7	
B-04	Bullet Tank 4 (6)	VOC	_	_		GC7	
B-05	Bullet Tank 5 (6)	VOC	_	_		GC7	
B-06	Bullet Tank 6 (6)	VOC	_	_		GC7	
T1/704	T. 1. 704	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	
TK701	Tank 701	H ₂ S	< 0.01	0.01			4

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/20	16	
Emission Point	Source Name(2)	Air Contaminant Name	Emission	n Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK702	Tank 702	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	4
11702	Talik 702	H ₂ S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4
TK703	Tank 703	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	4
11703	Tank 700	H ₂ S	< 0.01	0.01			
TK704	T1(704	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	4
17704	Tank 704	H ₂ S	< 0.01	0.01	4, 11, 13, 30		4
TK705	Tank 705	VOC	0.69	3.04	4, 11, 13, 30	4 44 40 40 00	4
1K/05	Tank 705	H ₂ S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4
TK706	Tank 706	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	4
1 17 00	TAIR 700	H ₂ S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4
TK707	Tank 707	VOC	0.69	3.04	4 44 40 00	4, 11, 12, 13, 30	4
TK/U/	Tank 707	H ₂ S	< 0.01	0.01	4, 11, 13, 30		4

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/2016			
Emission Point	Source Name(2)	Air Contaminant Name	Emission	n Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements	
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.	
TK708	Tank 708	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	4	
11700	TATIK 700	H_2S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4	
TK709	Tank 709	VOC	0.69	3.04	4, 11, 13, 30	4 11 12 13 30	4	
11709	Talik 709	H ₂ S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4	
TK710	TK710 Tank 710	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	4	
11710	Talik 7 TO	H ₂ S	< 0.01	0.01				
TK711	Tank 711	VOC	0.69	3.04	4, 11, 13, 30	4 44 40 40 00	4	
TR/TI	Talik 7 I I	H ₂ S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4	
TK712	Tank 712	VOC	0.69	3.04	4, 11, 13, 30	4, 11, 12, 13, 30	4	
11/12	Talik / IZ	H ₂ S	< 0.01	0.01	4, 11, 13, 30	4, 11, 12, 13, 30	4	
TI/742	Tank 713	VOC	6.42	1.06	31	40.04		
TK713	Talik / 13	H ₂ S	0.02	< 0.01	31	12, 31		

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/2016			
Emission Point	Source Name(2)	Air Contaminant Name	Emission	n Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements	
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.	
TK714	Tank 714	VOC	6.42	1.06	31	12, 31		
11/14	Talik 714	H_2S	0.02	< 0.01	31	12, 31		
TK715	Tank 715	VOC	0.15	0.65	4, 11, 30	4, 11, 12, 30	4	
110/15	Talik 713	H ₂ S	< 0.01	0.01	4, 11, 30	4, 11, 12, 30	7	
TK716	TK716 Tank 716	VOC	0.15	0.65	- 4, 11, 30	4, 11, 12, 30	4	
11710	Talik 710	H ₂ S	< 0.01	0.01		4, 11, 12, 30	4	
TK717	Tank 717	VOC	1.86	8.14	4, 11, 30	4, 11, 12, 30	4	
IK/I/	Talik 717	H ₂ S	< 0.01	0.02				
TK718	Tank 718	VOC	1.86	8.14	4, 11, 30	4, 11, 12, 30	4	
11/10	TAIIN / TO	H ₂ S	< 0.01	0.02	4, 11, 30	4, 11, 12, 30	4	
TK719	Tank 719	VOC	0.63	2.77	4.44.00		4	
17/19	TAUK / 19	H ₂ S	< 0.01	0.01	4, 11, 30	4, 11, 12, 30	4	

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/201	6	
Emission Point	Source Name(2)	Air Contaminant Name	Emissior	n Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK720	Tank 720	VOC	0.63	2.77	4, 11, 30	4, 11, 12, 30	4
17720	Talik 720	H ₂ S	< 0.01	0.01	4, 11, 30	., , ,	4
TK721	Tank 721	VOC	0.63	2.77	4, 11, 30	4, 11, 12, 30	4
TR/21	Talik 721	H ₂ S	< 0.01	0.01	7, 11, 50	4, 11, 12, 30	4
TK722	TK722 Tank 722	VOC	0.63	2.77	4, 11, 30	4, 11, 12, 30	4
TR/ZZ	Talik 722	H_2S	< 0.01	0.01			4
TK723	Tank 723	VOC	0.63	2.77	4, 11, 30	4 44 40 00	4
11/25	Talik 723	H ₂ S	< 0.01	0.01	4, 11, 30	4, 11, 12, 30	4
TK724	Tank 724	VOC	0.63	2.77	4, 11, 30	4, 11, 12, 30	4
11/124	Talik 124	H₂S	< 0.01	0.01			
TK725	Tank 725	VOC	1.56	0.06	31	12, 31	
18725	Talik 725	H ₂ S	< 0.01	< 0.01	31		

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/2016			
Emission Point	Source Name(2)	Air Contaminant Name	Emission	n Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements	
No. (1)	Source Marrie(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.	
TK726	Tank 726	VOC	1.56	0.06	31	12, 31		
18720	Talik 720	H ₂ S	< 0.01	< 0.01	31	12, 31		
TRUCK_RACK	Truck Rack	VOC	0.88	1.01	21	21		
BARGEDOCK	Barge Dock Loading	VOC	19.17	13.09	14, 15, 20	14, 16, 20		
		VOC	3.74	1.02	20, 23			
	Barge Dock Flare	NO_X	3.00	1.80				
VC-1		СО	4.00	2.40		20, 23	23	
		SO ₂	0.02	0.01				
TK401	Tank 401	VOC	0.57	0.20		12		
TK402	Tank 402	VOC	0.57	0.20		12		
TK403	Tank 403	VOC	0.57	0.20		12		
TK404	Tank 404	VOC	0.57	0.20		12		
TK405	Tank 405	VOC	0.57	0.20		12		

Permit Numbers: 9	342A, PSDTX963M1				Issuance Date: 11/09/2016		
Emission Point	Source Name(2)	Air Contaminant Name	Emission	Rates	Monitoring and Testing	Recordkeeping	Reporting
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Requirements Spec. Cond.	Requirements Spec. Cond.	Requirements Spec. Cond.
TK406	Tank 406	VOC	0.57	0.20		12	
TK407	Tank 407	VOC	0.57	0.20		12	
TK424	Tank 424	VOC	0.42	0.15		12	
TK425	Tank 425	VOC	0.42	0.15		12	
TK426	Tank 426	VOC	0.39	0.05		12	
PMARACK	Polymerized Asphalt Truck Rack	VOC	0.88	2.65	21	21	
RAILRACK	Polymerized Asphalt Railcar Rack	VOC	0.88	3.32	21	21	

Permit Numbers: 9	342A, PSDTX963M1		Issuance Date: 11/09/2016				
Emission Point	Source Name(2)	Air Contaminant Name	Emission	Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		VOC	23.22	25.77	14, 15, 22, 24		
		NO _X	4.09	5.59			
		CO	18.79	25.65		14, 16, 22, 24	22
MVC001	Controlled Marine Loading—Marine Vapor Combustor	РМ	0.19	0.25			
	vapor combustor	PM ₁₀	0.19	0.25			
		PM _{2.5}	0.14	0.19			
		SO ₂	11.53	9.69			
DOCK_UNCOLL _FUG	Uncontrolled and Uncollected Marine Loading	VOC	453.54	366.44	7	7	7
MARINE_FUG	Dock Area Piping Fugitives (5)	VOC	1.44	6.30	7	7	7

Permit Numbers: 93	342A, PSDTX963M1		Issuance Date: 11/09/2016				
Emission Point	Source Name(2)	Air Contaminant Name	Emission	n Rates	Monitoring and Testing	Recordkeeping Requirements Spec. Cond.	Reporting Requirements
No. (1)	Source Name(2)	(3)	lbs/hr	TPY (4)	Requirements Spec. Cond.		Spec. Cond.
		VOC	372.70	7.17	25, 27, 28, 29, 32, 33, 35		
		NO _X	5.44	0.16		25, 27, 28, 29, 32, 33, 35	
FLAREMSS, PORTCTRL,		со	10.52	0.19			
TKLAND-ATM, VPIPEMSS,	Site MSS Activities (6)	SO ₂	< 0.01	< 0.01			
VTRUCK, FRTANK		PM	0.31	0.01			
		PM ₁₀	0.31	0.01			
		PM _{2.5}	0.31	0.01			

Footnotes:

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - PM total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented PM_{10} total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
 - PM_{2.5} particulate matter equal to or less than 2.5 microns in diameter
 - CO carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Emissions are not authorized except during de-inventorying and cleaning operations conducted pursuant to applicable Maintenance, Startup and Shutdown Special Conditions.
- (7) Emission limits apply to total emissions from site maintenance, start-up and shutdown activities specified in Special Condition 26.

Permit Numbers: 9	343A and PSDTX963M1				Issuance Date: 09/01/2017			
Emission Point	Source Name(2)	Air Contaminant	Emission	n Rate	Monitoring and Testing Requirements Spec. Cond.	Recordkeeping Requirements	Reporting Requirements	
No. (1)	Source Name(2)	Name (3)	lbs/hour	TPY (4)		Spec. Cond.	Spec. Cond.	
FUG Refinery and Tank Farm	VOC	1.99	8.72	4, 13	4, 13, 18, 19	4, 13		
100	Fugitives (5)	H ₂ S	0.01	0.02	1, 10	4, 13, 16, 19	1, 10	
		VOC	0.28	1.23			17	
		NO _x	1.93	8.43		8, 11, 12, 17, 18, 19		
		СО	4.21	18.44				
STACK_1A	Boiler H-102A (55 MMBtu/hr)	PM	0.38	1.67	8, 11, 17			
		PM ₁₀	0.38	1.67				
		PM _{2.5}	0.38	1.67				
		SO ₂	0.03	0.13				

Permit Numbers: 9	343A and PSDTX963M1		Issuance Date: 09/01/2017				
Emission Point	Source Name(2)	Air Contaminant Name (3)	Emissio	n Rate	Monitoring and Testing Requirements Spec. Cond.	Recordkeeping Requirements	Reporting Requirements Spec. Cond.
No. (1)			lbs/hour	TPY (4)		Spec. Cond.	
		VOC	0.58	2.53		8, 11, 17, 18, 19	17
		NO _x	2.81	12.29			
		СО	8.83	38.67			
STACK_3	Process Heater H-105 (107.2 MMBtu/hr)	РМ	0.80	3.50	8, 11, 16, 17		
		PM ₁₀	0.80	3.50			
		PM _{2.5}	0.80	3.50			
		SO ₂	0.06	0.28			
	Hot Oil Heater 1 (40 MMBtu/hr)	VOC	0.22	0.94	4, 8, 11, 16	4, 8, 11, 18, 19	4
		NO _x	1.40	6.13			
		со	3.29	14.43			
STACK_2A		PM	0.30	1.31			
		PM ₁₀	0.30	1.31			
		PM _{2.5}	0.30	1.31			
		SO ₂	0.02	0.10			

Permit Numbers: 9343A and PSDTX963M1					Issuance Date: 09/01/2017			
Emission Point No. (1)	Source Name(2)	Air Contaminant Name (3)	Emission	n Rate	Monitoring and Testing Requirements Spec. Cond.	Recordkeeping Requirements	Reporting Requirements	
			lbs/hour	TPY (4)		Spec. Cond.	Spec. Cond.	
	Hot Oil Heater 2 (40 MMBtu/hr)	VOC	0.22	0.94	4, 8, 11, 16	4, 8, 11, 18, 19	4	
		NO _x	1.40	6.13				
		СО	3.29	14.43				
STACK_2B		PM	0.30	1.31				
		PM ₁₀	0.30	1.31				
		PM _{2.5}	0.30	1.31				
		SO ₂	0.02	0.10				
	Emergency Flare (Pilot and Purge Gas Emissions)	VOC	0.06	0.26	20, 21, 22	18, 19, 20, 22		
EMOEN ELADE		NO _x	0.05	0.22				
EMGEN_FLARE		СО	0.26	1.14				
		SO ₂	0.01	0.01				

Permit Numbers: 9	343A and PSDTX963M1		Issuance Date: 09/01/2017				
Emission Point	Source Name(2)	Air Contaminant	Emission	n Rate	Monitoring and Testing Requirements Spec. Cond.	Recordkeeping Requirements	Reporting Requirements
No. (1)		Name (3)	lbs/hour	TPY (4)		Spec. Cond.	Spec. Cond.
	Cooling Tower	VOC	0.80	0.70	- 14	14, 18, 19	
СТ		PM	0.96	4.22			
01		PM ₁₀	0.96	4.22			
		PM _{2.5}	0.96	4.22			
WWTP	Wastewater Treatment Plant	VOC	0.29	1.26		18, 19	
	PMA Heater 1 (9.2 MMBtu/hr)	VOC	0.10	-	8, 11	8, 11, 18, 19	
		NOx	0.43	-			
		СО	0.66	-			
PMAHTR1		РМ	0.14	-			
		PM ₁₀	0.14	-			
		PM _{2.5}	0.14	-			
		SO ₂	0.01	-			

Permit Numbers: 9	343A and PSDTX963M1		Issuance Date: 09/01/2017				
Emission Point	Source Name(2)	Air Contaminant Name (3)	Emission Rate		Monitoring and Testing	Recordkeeping Requirements	Reporting Requirements
No. (1)			lbs/hour	TPY (4)	Requirements Spec. Cond.	Spec. Cond.	Spec. Cond.
		VOC	0.10	-	8, 11	8, 11, 18, 19	
		NO _x	0.43	-			
	PMA Heater 2 (9.2 MMBtu/hr)	СО	0.66	-			
PMAHTR2		PM	0.14	-			
		PM ₁₀	0.14	-			
		PM _{2.5}	0.14	-			
		SO ₂	0.01	-			
	Total emissions from PMAHTR1 and PMAHTR2	VOC	-	0.44	N/A	N/A	
		NO _x	-	1.90			N/A
		СО	-	2.89			
PMAHTR_CAP		PM	-	0.60			
		PM ₁₀	-	0.60			
		PM _{2.5}	-	0.60			
		SO ₂	-	0.05			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- Specific point source name. For fugitive sources, use area name or fugitive source name.
- (2) volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - PM total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented PM₁₀ -
 - PM_{2.5} CO particulate matter equal to or less than 2.5 microns in diameter
 - carbon monoxide
- Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (4) (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Permit Numbers: 0	GHGPSDTX140		Issuance Date: 11/09/2016			
Emission Point	Source Name(2)	Air Contaminant Name (3)	Emission Rates	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
No. (1)			TPY (4)	Spec. Cond.	Spec. Cond.	Spec. Cond.
FUG	Refinery and Terminal	CH4 (5)	4.78	0.7	3, 6, 7	
	Fugitives	CO2e	119	6, 7		
		CO2 (5)	28,120			
CTACK 4A	Boiler H-102A	CH4 (5)	0.53	1	2.4	
STACK_1A	(55 MMBtu/hr)	N2O (5)	0.05	- 4	3, 4	
		CO2e	28,200]		
	Process Heater H-105 (107.2 MMBtu/hr)	CO2 (5)	54,800		3, 4	
CTACK 2		CH4 (5)	1.03	4		
STACK_3		N2O (5)	0.10			
		CO2e	54,900			
		CO2 (5)	20,500			
	Hot Oil Heater 1	CH4 (5)	0.39	4	3, 4	
STACK _2A	(40 MMBtu/hr)	N2O (5)	0.04			
		CO2e	20,500			
		CO2 (5)	20,500	4	3, 4	
STACK _2B	Hot Oil Heater 2	CH4 (5)	0.39			
STACK_2B	(40 MMBtu/hr)	N2O (5)	0.04			
		CO2e	20,500			
СТ	Cooling Tower	CH4(5)	0.13	- 5	3, 5	
Ci	Cooling Tower	CO2e	3.13			
\\\\\TD	Waste Water	CH4 (5)	6.78		3	
WWTP	Treatment Plant	CO2e	169			

Permit Numbers: 0	GHGPSDTX140		Issuance Date: 11/09/2016			
Emission Point No. (1)	Source Name(2)	Air Contaminant Name (3)	Emission Rates	Monitoring and Testing Requirements	Recordkeeping Requirements Spec. Cond.	Reporting Requirements
			TPY (4)	Spec. Cond.		Spec. Cond.
	Controlled Marine Loading—Marine Vapor Combustor	CO2 (5)	3960			
MVC001		CH4 (5)	0.07	8, 9, 10	3, 8, 9, 10	
WVCOOT		N2O (5)	0.01			
		CO2e	3970			
		CH4 (5)	4.94			
MARINE_FUG	Marine Dock Fugitives	CO2e	124	6,7	3, 6, 7	
	MSS Flare	CO2 (5)	176	11	3, 11	
FLAREMSS		CH4 (5)	0.00			
PLAKEWSS		N2O (5)	0.00			
		CO2e	176			

Footnotes:

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) CO_2 carbon dioxide N_2O nitrous oxide CH_4 methane

CO₂e - carbon dioxide equivalents based on the following Global Warming Potentials (Effective January 1, 2015): CO₂ (1), N₂O (298), CH₄ (25)

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
- (5) Emission rate is given for informational purposes only and does not constitute enforceable limit.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To Gravity Midstream Corpus Christi, LLC Authorizing the Construction and Operation of Crude and Hydrocarbon Processing Facility Located at Corpus Christi, Nueces County, Texas Latitude 27° 48′ 60″ Longitude –97° 29′ 35″

Amendment Date: November 9, 2016

Expiration Date: <u>December 2, 2021</u>

For the Commission

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] ¹
- 2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
- 3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

Revised (10/12)

- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] ¹
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
- 10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
- 14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

Revised (10/12) 2

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions

Permit Numbers 9342A and PSDTX963M1

Emission Limits

- 1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources Maximum Allowable Emission Rates," and in the table at Special Condition 26.A, and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.
- 2. The following compliance schedule shall apply.
 - A. The Special Conditions of this permit shall not become effective until the start of operation of any new petroleum product storage or marine loading facility whose construction was authorized by the permit amendment (form PI-1 dated August 10, 2015, as updated). Following such date, the requirements of Attachment 1 of the permit shall cease to apply. The permit holder shall retain a copy of any start-up notifications required under General Condition 4.
 - B. Prior to the date specified in paragraph A of this Special Condition, the permit Special Conditions which became effective on March 26, 2013 (included as Attachment 1 of this permit) shall remain effective. Within 180 days of the date specified in paragraph A of this Special Condition, the permit holder shall submit a permit alteration or amendment request to the TCEQ Executive Director to remove Attachment 1 from the permit.
- 3. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT). Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.

Federal Applicability

- 4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
 - A. Subpart A, General Provisions.
 - B. Subpart Kb, Organic Liquid Storage Tanks.

- 5. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61:
 - A. Subpart A, General Provisions.
 - B. Subpart FF, Benzene Waste Operations.
- 6. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:
 - A. Subpart A, General Provisions.
 - B. Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines.

Emission Standards and Fuel Specifications

Piping Components

7. Piping, Valves, Connectors, Pumps, Agitators, and Compressors — 28VHP

Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment:

A. The requirements of paragraphs F and G shall not apply (1) where the Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (PID);
- (2) a written or electronic database or electronic file;
- (3) color coding;
- (4) a form of weatherproof identification; or
- (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve;

or

the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a

cap, blind flange, plug, or second valve must be installed on the line or valve.

F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. If a relief valve is equipped with rupture disc, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.

G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

Special Conditions Permit Numbers 9342A and PSDTX963M1 Page 5

- H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.
- T. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.
- J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- K. Alternative monitoring frequency schedules of 30 TAC §§ 115.352–115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.
- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New

Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

Storage of Volatile Organic Compounds (VOCs)

- 8. As used in this permit,
 - "Crude oil" shall include stabilized lease condensate with a VOC vapor pressure of 11.0 psia or less at 95° F.
- 9. The true vapor pressure of any liquid stored in an atmospheric storage vessel at this facility shall not exceed 11.0 psia. Light crude oil shall not be stored, transferred or handled unless it has been previously processed to eliminate flash emissions.
- 10. Service and throughput restrictions.
 - A. Storage tank service shall be limited as follows:

Tank ID	Construction	Authorized Service
	Type	
B-01, B-02, B-03, B-04,	Pressure Vessel	LPG
B-05, B-06		
TK301, TK302	External	Crude Oil
	Floating Roof	
TK305, TK307	Internal Floating	PFD, HVGO, Crude
	Roof	Oil
TK308, TK309, TK310,	Fixed Roof	IVD, HVGO, PFD, VTB
TK311, TK312, TK313,		
TK314, TK315, TK316		
TK303, TK304, TK306	Internal Floating	Crude Oil
	Roof	
TK701, TK702, TK703,	Internal Floating	Crude Oil, LSR, HSR,
TK704, TK705, TK706,	Roof	Jet
TK707, TK708, TK709,		
TK710, TK711, TK712,		
TK715, TK716, TK717,		
TK718, TK719, TK720,		
TK721, TK722, TK723,		
TK724		
TK713, TK714, TK725,	Fixed Roof	Diesel, LSGO
TK726		

Tank ID	Construction	Authorized Service
	Type	
TK401, TK402, TK403,	Fixed Roof	PMA
TK404, TK405, TK406,		
TK407, TK424, TK425,		
TK426		

- B. This permit does not limit the throughput of internal floating roof tanks, provided that all control and emission limitation requirements of the permit are complied with.
- C. Acronyms used in this permit refer to the following petroleum products:

LPG: Liquefied Petroleum Gas

PFD: Pre-flashed Distillate

HVGO: Heavy Vacuum Gasoil

IVD: Intermediate Vacuum Distillate

VTB: Vacuum Tower Bottoms

LSR: Light Straight-Run Naphtha

HSR: Heavy Straight-Run Naphtha

LSGO: Low Sulfur Gasoil

PMA: Polymer Modified Asphalt

- 11. Storage tanks are subject to the following requirements: The control requirements specified in paragraphs A-D of this condition shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.50 psia at actual storage conditions or at 95°F, whichever is greater, or (2) to storage tanks smaller than 25,000 gallons.
 - A. An internal floating deck or "roof" or equivalent control shall be installed in all tanks. The floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: (1) a liquid-mounted seal, (2) two continuous seals mounted one above the other, or (3) a mechanical shoe seal.
 - B. An open-top tank containing a floating roof (external floating roof tank) which uses double seal or secondary seal technology shall be an approved control alternative to an internal floating roof tank provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal and the secondary seal is rim-mounted. A weathershield is not approvable as a secondary seal unless specifically reviewed and determined to be vaportight.

- C. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and seal gap measurements as specified in Title 40 Code of Federal Regulations § 60.113b (40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates seals were inspected and seal gap measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.
- D. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650 dated November 1, 1998 except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.
- E. The tanks shall be designed to completely drain its entire contents to a sump in a manner that leaves no more than 9 gallons of free-standing liquid in the tank or the sump.
- F. Tanks shall be constructed or equipped with a connection to a vapor recovery system that routes vapors from the vapor space under the landed roof to a control device.
- G. Uninsulated tank exterior surfaces exposed to the sun shall be white or aluminum. Storage tanks must be equipped with permanent submerged fill pipes.
- 12. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, control method used, tank capacity in Barrels, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions from tanks shall be calculated using the methods that were used to determine the MAERT limits in the permit amendment application (PI-1 dated August 10, 2015, as updated). Sample calculations from the application shall be attached to a copy of this permit at the plant site.

- 13. The following requirements apply to tanks in crude oil service.
 - A. The dissolved hydrogen sulfide in the crude oil shall not exceed 23 ppmw in any sample.

- B. In order to demonstrate compliance with this Special Condition, the permit holder shall determine the dissolved hydrogen sulfide concentration of each crude oil stock to be stored in the storage tanks identified above. The hydrogen sulfide concentration may be determined using method ASTM UOP163-10 or ASTM D7621-14. Any additional method of sampling method and analysis used must be approved by the TCEQ.
- C. The frequency of sampling shall be the more frequent of:
 - (1) annual: or
 - (2) within 60 days of any change of service for an affected tank.
- D. Records of H₂S concentrations measured to meet the requirements of this condition shall be maintained at the plant site.

Loading of VOCs (Marine Loading)

- 14. Marine loading vapors directed to a vapor combustor shall be routed through a blower system which directs the vapors to a vapor combustor. Flanged connections shall be used for all loading operations. Marine vessels shall not be loaded unless the vapor collection system is properly connected and the entire collection and destruction system is working as designed.
 - A. The marine loading vapor collection system shall be operated such that the vacuum maintained in the collection system during loading is no less than 1.5 inches of water and that the vessel being loaded is also under a vacuum. The collection system vacuum shall be continuously monitored and recorded at least once every six minutes. The vacuum monitor shall be installed, calibrated at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of ±5 percent of the vacuum being measured or ±0.15 inches of water.
 - B. If the vessel must remain inerted during loading (it is not possible to draw a vacuum on the marine vessel) due to safety concerns, the following requirement applies:
 - Before loading, the owner or operator of the marine terminal shall verify that the marine vessel has passed an annual vapor tightness test as specified in 40 CFR §63.565(c) (September 19, 1995) or 40 CFR §61.304(f) (October 17, 2000).
- 15. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections.
- 16. The permit holder shall maintain and update a monthly emissions record which includes calculated emissions of VOC from all loading operations over the

previous rolling 12 month period. The record shall include the loading spot, control method used, quantity loaded in barrels (bbl), name of the liquid loaded, vapor molecular weight, liquid temperature in degrees Fahrenheit, liquid vapor pressure at the liquid temperature in psia, liquid throughput for the previous month and rolling 12 months to date.

If the liquid vapor pressure is estimated at a default ambient temperature of 95° F, records of VOC temperature are not required to be kept for liquids loaded from unheated tanks which receive liquids that are at or below ambient temperatures. Emissions shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations."

17. The throughput of products loaded at Dock OD #14 shall be limited to the following:

Product	Ocean Vessel	Inland Barge
	(MMBbl/yr)	(MMBbl/yr)
Crude Oil (Including	70	10
stabilized condensate)		
LSR Naphtha	1.25	1.25
HSR Naphtha	3.75	3.75
Jet Fuel (Kerosene)	3.6	2.4
Diesel (No. 2 Fuel Oil)	2.4	1.6
LSGO (or Resid)	5	0

- 18. The following requirements apply to marine loading at Dock OD#14.
 - A. Ocean-going vessels shall be loaded at a rate not to exceed 25,000 Bbl/hr. Inland barges shall be loaded at a rate not to exceed 6,000 Bbl/hr.
 - B. All loading emissions shall be directed to a vapor combustor for control if the liquid loaded has a VOC vapor pressure greater than 0.50 psia at actual loading conditions. Marine loading shall be limited to products with a VOC vapor pressure not to exceed 10. psia.
- 19. The throughput of products loaded at Barge Dock BARGEDOCK shall be limited to the following:

Product	Mgal/hr	MMgal/yr
PFD	168	29.4
IVD	168	67.2
HVGO	147	84
No. 6 fuel oil	147	10.5
VTB	147	210

Product	Mgal/hr	MMgal/yr
Product	Mgai/III	Mingai/yi
Crude Oil	252	151.2

- 20. The following requirements apply to marine loading at Barge Dock BARGEDOCK:
 - A. Loading emissions of PFD and Crude Oil shall be vented to the Vapor Combustor (EPN VC-1).
 - B. The vapor combustor shall achieve 99% control of the waste gas directed to it. This shall be ensured by maintaining the temperature in, or immediately downstream of, the combustion chamber above 1500°F prior to the initial stack test performed in accordance with Special Condition 22. Following the completion of that stack test, the six minute average temperature shall be maintained above the minimum one hour average temperature maintained during the last satisfactory stack test.
 - (1) The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature monitor shall be installed, verified at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of ±2 percent of the temperature being measured expressed in degrees Celsius or ±2.5°C.
 - (2) Quality-assured (or valid) data must be generated when the VCU is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VCU operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
 - (3) The vapor combustor shall be operated with no visible emissions and have a constant pilot flame during all times waste gas could be directed to it. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
 - (4) Assist gas combusted in the vapor combustor shall be sweet natural gas containing no more than 5 grains of total sulfur per 100 dry standard cubic feet.

Loading of VOCs (Truck and Railcar)

- 21. The following requirements apply to truck and railcar loading operations.
 - A. Loading operations are limited to the following products: VTB, IVD and PMA.
 - B. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections.
 - C. The permit holder shall maintain and update a monthly emissions record which includes calculated emissions of VOC from all loading operations over the previous rolling 12 month period. The record shall include the loading spot, control method used, quantity loaded in barrels (bbl), name of the liquid loaded, vapor molecular weight, liquid temperature in degrees Fahrenheit, liquid vapor pressure at the liquid temperature in psia, liquid throughput for the previous month and rolling 12 months to date.

If the liquid vapor pressure is estimated at a default ambient temperature of 95° F, records of VOC temperature are not required to be kept for liquids loaded from unheated tanks which receive liquids that are at or below ambient temperatures. Emissions shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations."

Initial Determination of Compliance

22. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the marine vapor combustor (EPN MVC001) to demonstrate compliance with Special Conditions 1 and 24 of this permit. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:

- (1) Proposed date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
- (7) Procedure/parameters to be used to determine worst case emissions. The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.
- B. Air contaminants emitted from the marine vapor combustor to be tested for include (but are not limited to) methane, VOC, NO_v, CO and SO₂.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) and at such other times (identify the need for any periodic sampling here) as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. Stack emission testing shall occur during loading of LSR or Condensate, and loading shall occur at the maximum transfer rate. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the transfer rate in Bbl/hr is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEO Air Section Manager for the region.

E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling

Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to each local air pollution control program.

- F. Sampling ports and platform(s) shall be incorporated into the design of (source stack and EPN) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.
- 23. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the VCU, EPN VC-1 to demonstrate compliance with the MAERT. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) <u>Sampling Procedures Manual</u> and the EPA Reference Methods. (3/13)

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for 40 CFR Part 60 testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
 - (1) Proposed date for pretest meeting.
 - (2) Date sampling will occur.
 - (3) Name of firm conducting sampling.
 - (4) Type of sampling equipment to be used.
 - (5) Method or procedure to be used in sampling.
 - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ

- Regional Director must approve any deviation from specified sampling procedures.
- B. Air contaminants emitted from the VCU to be tested for include (but are not limited to) VOC.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) and at such other times (identify the need for any periodic sampling here) as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The facility being sampled shall operate within 90% of the maximum loading rate during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.
 - During subsequent operations, if the loading rate increases more than 10% of that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.
- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
 - One set of copies to the appropriate TCEQ Regional Office.
 - One set of copies to each local air pollution control program.
- F. Sampling ports and platform(s) shall be incorporated into the design of the VCU, EPN VC-1 according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

Continuous Demonstration of Compliance

- 24. Marine Vapor Combustor Performance Requirements.
 - A. The marine vapor combustor (EPN MVC001) shall achieve 99.5% control of the VOC directed to it. This shall be ensured by maintaining the temperature in, or immediately downstream of, the combustion chamber above 1500 °F prior to the initial stack test performed in accordance with Special Condition 22. Following the completion of that stack test, the six minute average temperature shall be maintained above the minimum one hour average temperature maintained during the last satisfactory stack test.
 - B. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature monitor shall be installed, calibrated or have a calibration check performed at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of ± 2 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}$ C.
 - Quality assured (or valid) data must be generated when the vapor combustor is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the vapor combustor operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
 - C. The vapor combustor shall be operated with no visible emissions and have a constant pilot flame during all times waste gas could be directed to it. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated or have a calibration check performed at a frequency in accordance with, the manufacturer's specifications.
 - D. Emissions of NO_x from the vapor combustor shall not exceed 0.06 lb/MMBtu (1-hr average), based on the higher heating value of the combined assist gas/waste gas stream.
- 25. The flare (EPN FLARE_MSS) shall be designed and operated in accordance with the following requirements:
 - A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications

of minimum heating value and maximum tip velocity at all times when emissions may be vented to them.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.

- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple, infrared monitor, or ultraviolet monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam assist to the flare.
- D. The permit holder shall install a continuous flow monitor and composition analyzer (or calorimeter) that provide a record of the vent stream flow and composition (total VOC or Btu content) to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition (or Btu content) shall be recorded each hour.
 - (1) The monitors shall be calibrated or have a calibration check performed on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg.
 - (2) Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000 (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR §60.18(f)(3) as amended through October 17, 2000 (65 FR 61744).

- (3) The calorimeter shall be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units/standard cubic foot of the gas.
- (4) The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12 month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §§60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour.

Maintenance, Startup and Shutdown Activities

General

26. This permit authorizes the emissions from the facilities authorized by this permit for the planned maintenance, startup, and shutdown (MSS) activities summarized in the table at Paragraph A.

This permit authorizes emissions from the following temporary facilities used to support planned MSS activities at permanent site facilities: frac tanks, containers, vacuum trucks, portable control devices identified in Special Condition 35, and controlled recovery systems. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities listed in this Attachment, and (c) does not operate as a replacement for an existing authorized facility.

A. MSS Activity Summary.

Facility	Activity	EPN
Storage Tanks	Operate tank with landed	FLAREMSS, PORTCTRL
	roof vented to control	
Storage Tanks	Tank with landed roof	TKLAND-ATM
	vented to atmosphere	
Storage Tanks	Drain, degas to	TKLAND-ATM
	atmosphere, and open tank	
Storage Tanks	Degas tank system to	FLAREMSS, PORTCTRL
	control	
Storage Tanks	Refill empty tank with	FLAREMSS, PORTCTRL
	landed roof	
Piping and process	Empty and degas to control	FLAREMSS, PORTCTRL
vessels	_	
Piping and process	Degas to atmosphere	VPIPEMSS
vessels		

Facility	Activity	EPN
Piping and process	Drain liquid	VPIPEMSS
vessels		
Air movers and	Drain liquid from tanks for	VTRUCK
vacuum trucks	planned maintenance	
Frac Tanks	Operate frac tank or	FRTANK
	similar temporary	
	tank/vessel	
See Paragraph B	Isolate, drain, degas to	VPIPEMSS
	atmosphere, and refill to	
	support planned	
	maintenance	
See Paragraph C	Miscellaneous low emitting	VPIPEMSS
	activities	

B. Routine Maintenance Activities

Pump repair/replacement

Fugitive component (valve, pipe, flange) repair/replacement

Compressor repair/replacement

Heat exchanger repair/replacement

Vessel repair/replacement

C. Miscellaneous Low Emitting Activities

Meter proving

Adhesives application

Sample collection

Cold solvent degreaser

Use and Disposal of Aerosol Products

Calibration/Inspection/Repair / Replacement of Analytical Equipment and CEMS

Inspection/ Cleaning/Repair/Replacement of Screens/Filters

Opening/Cleaning/Inspection/Repair /Replacement of gauges and sight glasses

Calibration/Inspection/Repair / Replacement of Process Instruments

Inspection/ Cleaning/Fluid

Addition/Repair/Replacement of Lube Oil Systems

Tank Seal Gap Measurements

Water Washing Empty Drums and Additive Totes and miscellaneous small equipment

Inspection/ Cleaning/Repair/Replacement of equipment in heavy-liquid service

27. Special Condition 26.C identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Special Condition 26.C shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Special Condition 26.C must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Special Condition 26.B may be tracked through the work orders or equivalent. Emissions from activities identified in Special Condition 26.B shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of each planned MSS activity not identified in Special Condition 26.B or 26.C and the emissions associated with it shall be recorded and include at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

Degassing and cleaning of process vessels and piping

28. Process units and facilities, with the exception of those identified in Special Conditions 30, 31, 33, and Special Condition 26.C shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.

- A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
- B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed following paragraph D or the system is no longer vented to atmosphere.
- C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
- D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.
 - (1) For MSS activities identified in Special Condition 26.B, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.

- The locations and/or identifiers where the purge gas or steam enters (2) the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 0. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to deinventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.
- E. Gases and vapors with VOC partial pressure greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:
 - (1) It is not technically practicable to depressurize or degas, as applicable, into the process.
 - (2) There is not an available connection to a plant control system (flare).
 - (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

All instances of venting directly to atmosphere per Paragraph E must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Special Condition 26.B.

Approved analytical methods

29. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.

- A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:
 - (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:

VOC Concentration = Concentration as read from the instrument*RF

In no case should a calibration gas be used such that the RF of the VOC (or mixture of VOCs) to be monitored is greater than 5.0.

- (2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.
- B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.
 - (1) The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.
 - (2) The tube is used in accordance with the manufacturer's guidelines.
 - (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

10,000*mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.

- C. Lower explosive limit measured with a lower explosive limit detector.
 - (1) The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
 - (2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
 - (3) A certified methane gas standard equivalent to 25% of the LEL for pentane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.

Storage tanks

- 30. This permit authorizes emissions from all floating roof tanks identified in Special Condition 1 during planned floating roof landings. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated in the MAERT. The following requirements apply to tank roof landings.
 - A. At all times that the roof is resting on its leg supports, the tank emissions shall be controlled by a closed vent system and control device meeting the following specifications:
 - (1) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, § 60.485(b).
 - (2) The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when the vapor space is directed to the control device. The vapor recovery system collection rate shall be no less than 100 cubic feet per minute when the tank is idle or the tank is being drained, and two times the fill rate when the tank is being refilled.

(3) The control device shall be operated as required by Special Condition 20 or 35, as applicable.

The roof shall be landed on its lowest legs unless entry or inspection is planned.

The requirements of this paragraph do not apply to uncontrolled degassing and/or ventilation conducted pursuant to paragraphs B–E of this Special Condition.

- B. After the tank has been completely emptied, the tank shall not be opened except as necessary to set up for degassing and cleaning. Floating roof tanks with liquid capacities less than 100,000 gallons may be degassed without control if the VOC partial pressure of the standing liquid in the tank has been reduced to less than 0.02 psia prior to ventilating the tank. Controlled degassing of the vapor space under the landed roof shall be completed as follows:
 - (1) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.
 - (2) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
 - (3) A volume of purge gas equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 29.
 - (4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.

- (5) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.
- C. The tank shall not be opened or ventilated without control, except as allowed by (1) or (2) below until one of the criteria in paragraph D of this condition is satisfied.
 - (1) Minimize air circulation in the tank vapor space.
 - (a) One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.
 - (b) Access points shall be closed when not in use.
 - (2) Minimize time and VOC partial pressure.
 - (a) The VOC partial pressure of the liquid remaining in the tank shall not exceed 0.044 psia as documented by the method specified in subparagraph D(1) of this condition;
 - (b) Blowers may be used to move air through the tank without emission control at a rate not to exceed 50 cubic feet per hour (cfh) for no more than 72 hours. All standing liquid shall be removed from the tank during this period; and
 - (c) Records shall be maintained of the blower circulation rate, the duration of uncontrolled ventilation, and the date and time all standing liquid was removed from the tank.
- D. The tank may be opened without restriction and ventilated without control after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure of less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.
 - (1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.
 - (2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:

- (a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A Appendix 1.
- (b) Take a representative sample of the liquid remaining in the tank and verify that the hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664.
- (c) Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify that the VOC concentration is less than 1000 ppmw through the procedure in Special Condition 29.
- (3) No standing liquid verified through visual inspection.

The permit holder shall maintain records to document the method used to release the tank.

- E. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information (as applicable):
 - (1) The identification of the tank and emission point number, and any control devices or controlled recovery systems used to reduce emissions;
 - (2) The reason for the tank roof landing;
 - (3) For the purpose of estimating emissions, the date, time, and other information specified for each of the following events:
 - (a) The roof was initially landed;
 - (b) All liquid was pumped from the tank to the extent practicable;
 - (c) Start and completion of controlled degassing, and total volumetric flow;
 - (d) All standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to < 0.02 psia.
 - (e) If there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow;
 - (f) Refilling commenced, liquid filling the tank, and the volume necessary to float the roof; and
 - (g) Tank roof off supporting legs, floating on liquid.

- (4) The estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events (c) and (g) with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7—Storage of Organic Liquids" dated November 2006 (or later edition) and the permit application.
- 31. Fixed roof storage tanks are subject to the requirements of Special Condition 30.C and 30.D. If the ventilation of the vapor space is controlled, the emission control system shall meet the requirements of Special Condition 30.B(1) through 30.B(4). Records shall be maintained per Special Condition 30.E (applicable portions).

Vacuum trucks and frac tanks

- 32. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
 - A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
 - B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
 - (1) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
 - (2) Equip fill line intake with a "duckbill" or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
 - (3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (a) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a "duckbill" or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
 - (b) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 29.A or 29.B.

- C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
- D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.
- E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in Paragraphs A through D do not apply.
- 33. The following requirements apply to temporary tanks ("frac tanks") and vessels used in support of MSS activities.
 - A. The exterior surfaces of these tanks/vessels that are exposed to the sun shall be white or aluminum. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.
 - B. These tanks/vessels must be covered and equipped with fill pipes that discharge within 6 inches of the tank/vessel bottom.
 - C. These requirements do not apply to vessels storing less than 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.
 - D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12 month period. This record must be updated by the last day of the month following. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC partial pressure at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources Loading Operations" and standing emissions determined using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources Storage Tanks."
 - E. If the tank/vessel is used to store liquid with VOC partial pressure less than 0.10 psi at 95°F, records may be limited to the days the tank is in service and

the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the permit application.

Use of permits by rule

34. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.

Approved control devices

35. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through a control device meeting the requirements of this permit condition.

- A. The plant flare, or a temporary flare, operated as specified in Special Condition 25.
- B. Carbon Adsorption System (CAS).
 - (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.
 - (2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC.
 - (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 29.A or 29.B.
 - (4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
 - (5) Records of CAS monitoring shall include the following:
 - (a) Sample time and date.

Special Conditions Permit Numbers 9342A and PSDTX963M1 Page 31

- (b) Monitoring results (ppmv).
- (c) Canister replacement log.
- (6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30 percent of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.

C. Thermal Oxidizer.

- (1) The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F and waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the oxidizer.
- (2) The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurements shall be made at intervals of six minutes or less and recorded at that frequency.

The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or ± 2.5 °C.

Date: November 9, 2016

Permit Numbers 9342A and PSDTX963M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No.	Source Name (2)	Air Contaminant	Emission Rates	
(1)	Source Name (2)	Name (3)	lbs/hour	TPY (4)
Retrofitted Tanks	,			
TK303	Tank 303	VOC	0.75	3.27
		H_2S	< 0.01	0.01
TK304	Tank 304	VOC	0.42	1.86
		H_2S	< 0.01	0.01
TK306	Tank 306	VOC	0.60	2.63
		H_2S	< 0.01	0.01
Existing Tanks				
TK301	Tank 301	VOC	6.10	2.03
TK302	Tank 302	VOC	6.10	2.03
TK305	Tank 305	VOC	3.16	1.25
TK307	Tank 307	VOC	3.16	1.25
TK308	Tank 308	VOC	0.43	0.38
TK309	Tank 309	VOC	0.43	0.38
TK310	Tank 310	VOC	0.43	0.38
TK311	Tank 311	VOC	0.26	0.22
TK312	Tank 312	VOC	1.09	2.44
TK313	Tank 313	VOC	1.09	2.44
TK314	Tank 314	VOC	0.61	1.37
TK315	Tank 315	VOC	0.61	1.37
TK316	Tank 316	VOC	1.09	2.44
Splitter LPG Storage				
B-01	Bullet Tank 1 (6)	VOC	<u> </u>	_

Emission Point No.	Source Name (2)	Air	Emission Rates	
(1)		Contaminant – Name (3)	lbs/hour	TPY (4)
B-02	Bullet Tank 2 (6)	VOC	_	_
B-03	Bullet Tank 3 (6)	VOC	_	_
B-04	Bullet Tank 4 (6)	VOC	_	_
B-05	Bullet Tank 5 (6)	VOC	_	_
B-06	Bullet Tank 6 (6)	VOC	_	_
Tank Farm Tanks		,		
TK701	Tank 701	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK702	Tank 702	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK703	Tank 703	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK704	Tank 704	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK705	Tank 705	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK706	Tank 706	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK707	Tank 707	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK708	Tank 708	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK709	Tank 709	VOC	0.69	3.04
		H ₂ S	< 0.01	0.01

Emission Point No. (1)	Source Name (2)	Air	Emission Rates	
		Contaminant – Name (3)	lbs/hour	TPY (4)
TK710	Tank 710	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK711	Tank 711	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK712	Tank 712	VOC	0.69	3.04
		H_2S	< 0.01	0.01
TK713	Tank 713	VOC	6.42	1.06
		H_2S	0.02	< 0.01
TK714	Tank 714	VOC	6.42	1.06
		H_2S	0.02	< 0.01
TK715	Tank 715	VOC	0.15	0.65
		H_2S	< 0.01	0.01
TK716	Tank 716	VOC	0.15	0.65
		H_2S	< 0.01	0.01
TK717	Tank 717	VOC	1.86	8.14
		H_2S	< 0.01	0.02
TK718	Tank 718	VOC	1.86	8.14
		H_2S	< 0.01	0.02
TK719	Tank 719	VOC	0.63	2.77
		H_2S	< 0.01	0.01
TK720	Tank 720	VOC	0.63	2.77
		H_2S	< 0.01	0.01
TK721	Tank 721	VOC	0.63	2.77
		H_2S	< 0.01	0.01
TK722	Tank 722	VOC	0.63	2.77
		H_2S	< 0.01	0.01

Emission Point No. (1)	Source Name (2)	Air	Emission Rates	
		Contaminant — Name (3)	lbs/hour	TPY (4)
TK723	Tank 723	VOC	0.63	2.77
		H_2S	< 0.01	0.01
TK724	Tank 724	VOC	0.63	2.77
		H ₂ S	< 0.01	0.01
TK725	Tank 725	VOC	1.56	0.06
		H ₂ S	< 0.01	< 0.01
TK726	Tank 726	VOC	1.56	0.06
		H_2S	< 0.01	< 0.01
Existing Truck Rack,	Rail Rack and Barge Dock	,		<u>'</u>
TRUCK_RACK	Truck Rack	VOC	0.88	1.01
BARGEDOCK	Barge Dock Loading	VOC	19.17	13.09
VC-1	Barge Dock Flare	VOC	3.74	1.02
		NO _x	3.00	1.80
		СО	4.00	2.40
		SO ₂	0.02	0.01
Existing PMA Tanks		,		
TK401	Tank 401	VOC	0.57	0.20
TK402	Tank 402	VOC	0.57	0.20
TK403	Tank 403	VOC	0.57	0.20
TK404	Tank 404	VOC	0.57	0.20
TK405	Tank 405	VOC	0.57	0.20
TK406	Tank 406	VOC	0.57	0.20
TK407	Tank 407	VOC	0.57	0.20
TK424	Tank 424	VOC	0.42	0.15
TK425	Tank 425	VOC	0.42	0.15
TK426	Tank 426	VOC	0.39	0.05

Emission Point No.	Source Name (2)	Air Contaminant	Emission	Rates
(1)	Source Name (2)	Name (3)	lbs/hour	TPY (4)
PMARACK	Polymerized Asphalt Truck Rack	VOC	0.88	2.65
RAILRACK	Polymerized Alphalt Railcar Rack	VOC	0.88	3.32
Marine Dock				
MVC001	Controlled Marine Loading—	VOC	23.22	25.77
	Marine Vapor Combustor	NO _x	4.09	5.59
		СО	18.79	25.65
		PM	0.19	0.25
		PM_{10}	0.19	0.25
		PM _{2.5}	0.14	0.19
		SO ₂	11.53	9.69
DOCK_UNCOLL_FUG	Uncontrolled and Uncollected Marine Loading	VOC	453.54	366.44
MARINE_FUG	Dock Area Piping Fugitives (5)	VOC	1.44	6.30
MSS		<u> </u>		
FLAREMSS,	Site MSS Activities (7)	VOC	372.70	7.17
PORTCTRL, TKLAND-ATM,		NO _x	5.44	0.16
VPIPEMSS, VTRUCK, FRTANK		СО	10.52	0.19
		SO ₂	< 0.01	< 0.01
		PM	0.31	0.01
		PM ₁₀	0.31	0.01
		PM _{2.5}	0.31	0.01

⁽¹⁾ Emission point identification - either specific equipment designation or emission point number from plot plan.

- volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO, - sulfur dioxide

⁽²⁾ Specific point source name. For fugitive sources, use area name or fugitive source name.

- total particulate matter, suspended in the atmosphere, including PM_{10} and PM_{20} , PM as represented

 PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including PM_{ast}, as represented

 ${\rm PM}_{_{2.5}}$ - particulate matter equal to or less than 2.5 microns in diameter

- carbon monoxide

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Emissions are not authorized except during de-inventorying and cleaning operations conducted pursuant to applicable Maintenance, Startup and Shutdown Special Conditions.
- (7) Emission limits apply to total emissions from site maintenance, start-up and shutdown activities specified in Special Condition 26.

Date: November 9, 2016



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Gravity Midstream Corpus Christi, LLC
Authorizing the Construction and Operation of
Crude & Hydrocarbon Processing Facility
Located at Corpus Christi, Nueces County, Texas
Latitude 27° 49′ 16″ Longitude-97° 29′ 25″

Permits: 9343A and PSDTX963M1		
Revision Date:	September 1, 2017	- 'Ka) 1 trab
Expiration Date:	July 29, 2020	· QAP
· -	·	For the Commission

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] ¹
- Voiding of Permit. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
- 3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

Revised (10/12)

1

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] 1
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
- 10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
- 14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

Revised (10/12) 2

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions

Permit Numbers 9343A and PSDTX963M1

- 1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources Maximum Allowable Emission Rates" (MAERT), and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.
- 2. The following compliance schedule shall apply.
 - A. The Special Conditions of this permit shall not become effective until the resumption of normal operations of the crude oil refining process whose modification was authorized by the permit amendment (form PI-1 filed August 10, 2015). Following such date, the requirements of Attachment 1 of the permit shall cease to apply. The permit holder shall retain a copy of any start-up notifications required under General Condition 4.
 - B. Prior to the date specified in paragraph A of this Special Condition, the permit Special Conditions which became effective on July 29, 2010 (included as Attachment 1 of this permit) shall remain effective. Within 180 days of the date specified in paragraph A of this Special Condition, the permit holder shall submit a permit alteration or amendment request to the TCEQ Executive Director to remove Attachment 1 from the permit.
- 3. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than one (1) weight percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.

Federal Applicability

- 4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
 - A. Subpart A, General Provisions.
 - B. Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units.
 - C. Subpart Ja, Petroleum Refineries for which Construction, Reconstruction or Modification Commenced after May 14, 2007.
 - D. Subpart GGG, Equipment Leaks of VOC in Petroleum Refineries

- E. Subpart GGGa, Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction or Modification Commenced after November 7, 2006.
- F. Subpart QQQ, Petroleum Refinery Wastewater Systems.
- 5. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61:
 - A. Subpart A, General Provisions.
 - B. Subpart FF, Benzene Waste Operations.
- 6. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:
 - A. Subpart A, General Provisions.
 - B. Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines.

Emission Standards And Fuel Specifications

Combustion Sources

- 7. Opacity of emissions from boiler and heater stacks must not exceed 5 percent averaged over a six-minute period.
- 8. The permit holder shall comply with either of the following requirements:
 - A. Install a continuous hydrogen sulfide (H₂S) monitoring system in a portion of the fuel gas system common to the fuel gas combustion devices covered by this permit in accordance with the fuel sulfur monitoring requirements of 40 CFR §60.107a.
 - B. Maintain on the plant site a written exemption from monitoring from the EPA Administrator granted in accordance with 40 CFR §60.107a(b).
- 9. Fuel used in combustion devices authorized by this permit shall be refinery fuel gas or natural gas. The refinery fuel gas or natural gas shall not contain H₂S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H₂S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.
- 10. Emissions of air contaminants from combustion sources covered by the permit shall be limited as follows:

Pollutant	Facility EPN	Emission Standard	Averaging
			Time
NO_{v}	STACK_3	0.026 lb/MMBtu (HHV)	1-hr
NO_{v}	STACK_1A,	0.035 lb/MMBtu (HHV)	1-hr
A	STACK_2A,		
	STACK_2B		
CO	STACK_1A,	100 ppmvd exhaust	1-hr
	STACK_3	concentration,	
		corrected to 3% O ₂	
CO	STACK_2A,	100 ppmvd exhaust	1-hr
	STACK_2B	concentration,	
		corrected to 3% O ₂	

11. The permit holder shall install and operate a totalizing fuel flow meter to measure the gas fuel usage for each combustion device and fuel usage for each shall be recorded monthly. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 5 percent.

Quality assured (or valid) data must be generated when the boiler (heater or furnace) is operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the boiler (heater or furnace) operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

12. Boiler H-102A (EPN STACK_1) is limited to a maximum fuel input of 51.1 MMBtu per hour (hr). Records of fuel consumption shall be kept to demonstrate compliance with this condition. Demonstration of compliance with this condition shall also demonstrate compliance with the emission limits of Special Condition No. 1.

Piping Components

13. Piping, Valves, Connectors, Pumps, Agitators, and Compressors — 28VHP

Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment:

A. The requirements of paragraphs F and G shall not apply (1) where the Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a

list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (P&ID);
- (2) a written or electronic database or electronic file;
- (3) color coding;
- (4) a form of weatherproof identification; or
- (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an

open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve;

or

- (2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.
- F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. If a relief valve is equipped with rupture disc, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

Special Conditions Permit Numbers 9343A and PSDTX963M1 Page 6

- Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.
- G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with an automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.
- H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.
- I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEO Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and

- severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.
- J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- K. Alternative monitoring frequency schedules of 30 TAC §§ 115.352–115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.
- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

Cooling Tower

- 14. The cooling tower (EPN CT) shall be operated and monitored in accordance with the following requirements:
 - A. The cooling tower water shall be monitored monthly for VOC leakage from heat exchangers in accordance with the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or another air stripping method approved by the TCEQ Executive Director.
 - B. Cooling tower water VOC concentrations above 0.08 ppmw indicate faulty equipment. Equipment shall be maintained so as to minimize VOC emissions into the cooling water. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit in which the leak occurs.
 - Emissions from the cooling tower are not authorized if the VOC concentration of the water returning to the cooling tower exceeds 0.8 ppmw. VOC concentrations above 0.8 ppmw are not subject to extensions for delay of repair under this permit condition.
 - C. The results of the monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded.
 - The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12 month cooling water emission rate shall be recorded on a monthly basis

and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

- D. Each cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drifts eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
- E. Total dissolved solids (TDS) shall not exceed 3,000 parts per million by weight (ppmw). Dissolved solids in the cooling water drift are considered to be emitted as PM, PM_{10} , and $PM_{2.5}$ as represented in the permit application calculations.
- F. Cooling water shall be sampled at least once per quarter for TDS.
- G. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.
 - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, and SM 2540 C [SM 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (2) Alternate sampling and analysis methods may be used to comply with D(1) with written approval from the TCEQ Regional Director.
 - (3) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.

Emission rates of PM, PM_{10} and $PM_{2,5}$ shall be calculated using the measured TDS, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Wastewater

15. Process wastewater shall be immediately directed to a covered system. All lift stations, manholes, junction boxes, conveyances, and any other wastewater facilities shall be covered to minimize emissions.

Initial Demonstration of Compliance

16. For the purposes of demonstrating compliance with special conditions 1 and 10, the requirements of Special Condition 17 shall apply to each of hot oil heaters 1 and 2 (EPNs STACK_2A and STACK_2B). Stack sampling shall be repeated for

Process Heater H-105 (EPN STACK_3). The the following modifications apply to stack testing required under this special condition.

- A. Air contaminants emitted from each hot oil heater to be tested included (but are not limited to) NO_y, CO and VOC.
- B. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the light oil/condensate processing facility and at such other times (identify the need for any periodic sampling here) as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- 17. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from Boiler H-102A (EPN STACK_1A) and Process Heater H-105 (EPN STACK_3). The testing required by this special condition for NO_x, carbon monoxide (CO), and volatile organic compounds (VOC) shall be used to determine initial compliance with the pound-per-hour limit of the MAERT. Sampling must be conducted in accordance with appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and in accordance with EPA Reference Method 7E for NO_x or an equivalent method. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.
 - A. The appropriate TCEQ Regional Office in the region where the source is located shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest

meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any pollutant specified in B of this condition shall be submitted to the TCEQ Office of Permitting and Registration, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for New Source Performance Standards (NSPS) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- B. Air contaminants emitted from Boiler H-102A (EPN STACK_1A) to be tested for include (but are not limited to) NO_x. Air contaminants emitted from and Process Heater H-105 (EPN STACK_3) to be tested for include (but are not limited to) NO_x, CO, and VOC. The boilers shall be tested firing natural gas at a load of approximately 100 percent.
- C. The holder of this permit may operate Boiler H-102A (EPN STACK_1A) and Process Heater H-105 (EPN STACK_3) outside the proposed operating range during the initial compliance test for the purpose of determining the compliance operating ranges. Exceedances of the emission limitations of Special Condition Nos. 1 and 7 which may occur while such testing is performed shall not be a violation of this permit. The emission limitations of Special Condition Nos. 1 and 7 are applicable at all other times.
- D. Sampling ports and platforms shall be incorporated into the design of the boiler stack according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the Executive Director of the TCEQ.
- E. The plant shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting.
 - If the plant is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.
- F. Copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Corpus Christi Regional Office

Note: Initial stack sampling for Boiler H-102A was completed on January 15 and 16, 1997.

Additional Requirements

- 18. The holder of this permit shall physically identify and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:
 - A. The facility identification numbers as submitted to the Emissions Inventory Section of the TCEQ.
 - B. The emission point numbers as listed on the MAERT.
- 19. All records required by the permit general and special conditions shall be retained for at least five years.

Flare Provisions

20. The holder of this permit shall keep records of the flare monitoring which was conducted in December 1998.

If TCEQ requests that the flare be monitored, the holder of this permit shall, within a reasonable amount of time, install a flow monitor and an analyzer that provide a record of the vent stream flow and composition (total VOC) to the flare provided, however, in no event will the holder of this permit be required to install such flow monitor and analyzer prior to September 30, 2002. The flow monitor sensor and analyzer sample points should be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed.

The average hourly values of the flow and composition shall be recorded. Records of the hourly averages shall be maintained for two years and be made available to the Executive Director of the TCEQ upon request.

- 21. The flare shall be equipped with a continuous burning pilot and an automatic reignition system. The pilot fuel supply shall be equipped with a flow indicator, such as a gas rotameter, which will provide visual confirmation of pilot fuel gas flow. Any interruption in pilot gas flow will require immediate corrective action. Those components of the automatic reignition system which require periodic replacement shall be replaced as needed, but in no case shall they remain in service longer than recommended by the manufacturer.
- 22. Flares shall be designed and operated in accordance with the following requirements:
 - A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications

Special Conditions Permit Numbers 9343A and PSDTX963M1 Page 12

of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate TCEQ Regional Office to demonstrate compliance with these requirements.

- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
- C. Each flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam assist to the flare.

Date: November 9, 2016

Permit Numbers 9343A and PSDTX963M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No.	Source Name (2)	Air Contaminant	Emission Rates		
(1)		Name (3)	lbs/hour	TPY (4)	
FUG	Refinery and Tank Farm Fugitives (5)	VOC	1.99	8.72	
		H ₂ S	0.01	0.02	
STACK_1A	Boiler H-102A (55 MMBtu/hr)	VOC	0.28	1.23	
		NO _X	1.93	8.43	
		СО	4.21	18.44	
		PM	0.38	1.67	
		PM ₁₀	0.38	1.67	
		PM _{2.5}	0.38	1.67	
		SO ₂	0.03	0.13	
STACK_3	Process Heater H-105 (107.2 MMBtu/hr)	VOC	0.58	2.53	
		NO _X	2.81	12.29	
		CO	8.83	38.67	
		PM	0.80	3.50	
		PM ₁₀	0.80	3.50	
		PM _{2.5}	0.80	3.50	
		SO ₂	0.06	0.28	

Emission Point No.	Source Name (2)	Air Contaminant Name (3)	Emission Rates		
(1)			lbs/hour	TPY (4)	
STACK _2A	Hot Oil Heater 1 (40. MMBtu/hr)	VOC	0.22	0.94	
		NO _X	1.40	6.13	
		СО	3.29	14.43	
		PM	0.30	1.31	
		PM ₁₀	0.30	1.31	
		PM _{2.5}	0.30	1.31	
		SO ₂	0.02	0.10	
STACK _2B	Hot Oil Heater 2 (40. MMBtu/hr)	VOC	0.22	0.94	
		NO _X	1.40	6.13	
		СО	3.29	14.43	
		PM	0.30	1.31	
		PM ₁₀	0.30	1.31	
		PM _{2.5}	0.30	1.31	
		SO ₂	0.02	0.10	
EMGEN_FLARE	Emergency Flare (Pilot and Purge Gas Emissions)	VOC	0.06	0.26	
		NO _X	0.05	0.22	
		СО	0.26	1.14	
		SO ₂	0.01	0.01	
СТ	Cooling Tower	VOC	0.80	0.70	
		PM	0.02	0.08	
		PM ₁₀	0.01	0.05	
		PM _{2.5}	< 0.01	< 0.01	
WWTP	Waste Water Treatment Plant	VOC	0.29	1.26	

Emission Point No.	Source Name (2)	Air Contaminant Name (3)	Emission Rates		
(1)			lbs/hour	TPY (4)	
PMAHTR1	PMA Heaters 1 (9.2 MMBtu/hr)	VOC	0.10	_	
		NO _X	0.43	_	
		СО	0.66	_	
		PM	0.14	_	
		PM ₁₀	0.14	_	
		PM _{2.5}	0.14	_	
		SO ₂	0.01	_	
PMAHTR2	PMA Heater 2 (9.2 MMBtu/hr)	VOC	0.10	_	
		NO _X	0.43	_	
		СО	0.66	_	
		PM	0.14	_	
		PM ₁₀	0.14	_	
		PM _{2.5}	0.14	_	
		SO ₂	0.01	_	
PMAHTR_CAP	Total emissions from PMAHTR1 and PMAHTR2	VOC	_	0.44	
		NO _X	_	1.90	
		СО	_	2.89	
		PM	_	0.60	
		PM ₁₀	_	0.60	
		PM _{2.5}	_	0.60	
		SO ₂	_	0.05	

⁽¹⁾ Emission point identification - either specific equipment designation or emission point number from plot plan.

⁽²⁾ Specific point source name. For fugitive sources, use area name or fugitive source name.

⁽³⁾ VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

Permit Numbers 9343A and PSDTX963M1 Page 4

Emission Sources - Maximum Allowable Emission Rates

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as

represented

PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as

represented

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: September 1, 2017



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To Gravity Midstream Corpus Christi, LLC Authorizing the Construction and Operation of Crude and Hydrocarbon Processing Facility Located at Corpus Christi, Nueces County, Texas Latitude 27° 49′ 16″ Longitude –97° 29′ 25″

Permit: GHGPSDTX140		(Ka) 1 that
Issuance Date:	November 9, 2016	
		For the Commission

- 1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] ¹
- 2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
- 3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

Revised (10/12)

- 6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
- 8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] ¹
- 9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
- 10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
- 14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. ¹

Revised (10/12) 2

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions

Permit Number GHGPSDTX140

1. This permit authorizes greenhouse gas (GHG) emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.

Operational restrictions; emission limitations; and monitoring, recordkeeping, and reporting requirements of this permit shall not become effective until the start of operation of any of the facilities whose construction was authorized by the permit amendment (form PI-1 filed August 10, 2015). The permit holder shall retain a copy of any start-up notifications required under General Condition 4.

This permit authorizes GHG emissions from maintenance, startup, and shutdown (MSS) activities, provided that GHG emissions are limited as required by this Special Condition, and MSS activities are conducted pursuant to the requirements of Special Condition 11.

- 2. Any calculation for carbon dioxide equivalent (CO₂e) emission rates required by this permit shall employ Global Warming Potentials (GWP) contained in Greenhouse Gas Regulations, 40 CFR Part 98, Subpart A, Table A-1, as amended on December 11, 2014 (79 FR 73779).
- 3. Where a methodology of 40 CFR Part 98 is referenced in this permit, such reference method shall be modified as follows:
 - A. References to annual measurements shall be construed as rolling 12-month totals if the relevant parameter is measured on a monthly or more frequent basis.
 - B. References to annual measurements that are not measured at a frequency greater than one month (e.g., quarterly or semiannual) shall be construed as the average of the most recent measurements based on a rolling 12-month period (e.g., average of 4 quarterly or 2 semiannual measurements).

Operational and Monitoring Requirements for Combustion Devices

- 4. Boiler H-102A, Charge Heater H-105, and Hot Oil Heaters 1 and 2 (EPNs STACK_1A, STACK_3, STACK_2A, STACK_2B, respectively) are subject to the following requirements.
 - A. Rolling 12-month CO₂e emissions shall be calculated each month using the methods provided at 40 CFR § 98.34(a).
 - B. Combustion devices shall be operated with a net thermal efficiency of no less than 80 percent on a 12-month rolling average, excluding periods of maintenance, startup and shutdown. This shall be ensured by using the

following good combustion practices: operating each device at an optimum air-fuel ratio, limiting the device's operating temperature to the extent practicable, and reducing heat loss through the use of insulating materials where feasible.

Thermal efficiency shall be calculated and recorded at least monthly using equation G-1 from American Petroleum Institute (API) method 560 (4th ed. or later), Annex G using monitoring data collected as required under this permit and permit 9343A, other quality-assured data, and engineering judgment.

If the maximum range between twelve or more consecutive monthly efficiency calculations does not exceed 5 percentage points, and each calculation demonstrates compliance with the minimum efficiency requirements of this paragraph, the permit holder may elect to reduce the frequency of performing the calculation to quarterly (skipping up to two monthly calculations); provided, however, that:

- (1) In case a quarterly efficiency calculation yields an efficiency value outside of the maximum range specified in this previous paragraph, monthly efficiency calculations shall be resumed.
- (2) In case a quarterly efficiency calculation shows non-compliance with the minimum efficiency requirement of this paragraph, the permit holder shall assume that a condition of non-compliance occurred during each month of the previous quarter where a calculation was skipped.
- C. Combustion devices shall be fired with pipeline quality natural gas and a maximum of 5 percent process gas.

The higher heating value (HHV) of the fuel shall be determined and recorded on a semiannual basis following procedures provided at 40 CFR § 98.34(a)(6).

The carbon content of the fuel shall be determined and recorded on a semiannual basis following the procedures provided at 40 CFR § 98.34(b)(3).

- D. The permit holder shall install, operate, and maintain an automated air/fuel controller in each combustion device.
- E. The permit holder shall continuously monitor and record the exhaust temperature and the oxygen content of the flue gas for each combustion device. Monitoring devices shall reduce temperature and oxygen readings to six-minute averages or less and record readings at that frequency.

The temperature monitor shall be installed, calibrated or have a calibration check performed at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the

greater of ± 2 percent of the temperature being measured expressed in degrees Celsius or ± 2.5 °C.

Oxygen analyzers shall be quality-assured at least quarterly using cylinder gas audits (CGAs) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2. A relative accuracy test audit (RATA) is required once every four quarter in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.1.

Quality assured (or valid) data must be generated when the combustion device is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VCU operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

F. The permit holder shall install, calibrate, maintain, and operate a continuous fuel flow monitor and record the average hourly fuel gas consumption of each combustion device. Fuel flow meters shall be calibrated as provided for at 40 CFR § 98.34(b)(1).

Operational and Monitoring Requirements for Heat Exchange Systems

5. Emissions from the cooling tower due to leaks in heat exchange systems (EPN CT) shall be minimized as follows.

The permit holder shall implement a Leak Detection and Repair Program for emissions of VOC as a surrogate for methane, as specified in Special Condition 14 of Permits 9343A and PSDTX963M1.

Operational and Monitoring Requirements for Equipment Leak Fugitives

- 6. Emissions from leaking piping components (EPNs FUG and MARINE_FUG) shall be minimized as follows.
 - The permit holder shall implement a Leak Detection and Repair Program for emissions of VOC as a surrogate for methane, as specified in Special Condition 7 of Permits 9342A and PSDTX963M1, and Special Condition 13 of Permits 9343A and PSDTX963M1.
- 7. Total rolling 12-month CO₂e emissions shall be calculated as provided for at 40 CFR § 98.253(l), except that mass emission rates shall be converted and recorded in units of short tons per year.

Special Conditions Permit Number GHGPSDTX140 Page 4

Operational and Monitoring Requirements for the Marine Vapor Combustion Unit

- 8. The Marine Vapor Combustion Unit (EPN MVC-001) shall achieve 99.5% control of methane (CH₄) directed to it. This shall be ensured by complying with applicable monitoring requirements of Special Condition 20 of permits 9342A and PSDTX963M1.
- 9. In order to demonstrate compliance with Special Condition 8, Stack sampling of the Marine Vapor Combustion Unit shall be performed as specified in Special Condition 22 of permits 9342A and PSDTX953M1.
- 10. Total rolling 12-month CO₂e emissions from the Marine Vapor Combustion Unit shall be calculated on a monthly basis as provided for at 40 CFR §98.33(a)(1)(i). Total natural gas fuel usage and total flow rate of waste gas shall be determined using an operational non-resettable flow meter.

Operational and Monitoring Requirements for Planned Maintenance, Startup and Shutdown Activities (MSS)

11. The permit holder shall comply with all applicable control monitoring and recordkeeping requirements of permits 9342A, 9343A, and PSDTX963M1 pertaining to planned MSS activities.

Date: November 9, 2016

Permit Number GHGPSDTX140

This table lists the maximum allowable emission rates of greenhouse gas (GHG) emissions, as defined in Title 30 Texas Administrative Code § 101.1, for all sources of GHG air contaminants on the applicant's property that are authorized by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities authorized by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission Rates
Limssion Fourt No. (1)	Source Name (2)	Name (3)	TPY (4)
FUG	Refinery and Terminal Fugitives	CH ₄ (5)	4.78
		CO ₂ e	119
STACK_1A	Boiler H-102A (55 MMBtu/hr)	CO ₂ (5)	28,120
		CH ₄ (5)	0.53
		N ₂ O (5)	0.05
		CO ₂ e	28,200
STACK_3	Process Heater H-105 (107.2 MMBtu/hr)	CO ₂ (5)	54,800
		CH ₄ (5)	1.03
		N ₂ O (5)	0.10
		CO ₂ e	54,900
STACK _2A	Hot Oil Heater 1 (40. MMBtu/hr)	CO ₂ (5)	20,500
		CH ₄ (5)	0.39
		N ₂ O (5)	0.04
		CO ₂ e	20,500
STACK _2B	Hot Oil Heater 2 (40. MMBtu/hr)	CO ₂ (5)	20,500
		CH ₄ (5)	0.39
		N ₂ O (5)	0.04
		CO ₂ e	20,500

Emission Point No. (1)	Source Name (2)	Air Contaminant	Emission Rates
Emission Fourt No. (1)	Source Name (2)	Name (3)	TPY (4)
СТ	Cooling Tower	CH ₄ (5)	0.13
		CO ₂ e	3.13
WWTP	Waste Water Treatment Plant	CH ₄ (5)	6.78
		CO ₂ e	169
MVC001	Controlled Marine Loading—Marine Vapor Combustor	CO ₂ (5)	3960
		CH ₄ (5)	0.07
		N ₂ O (5)	0.01
		CO ₂ e	3970
MARINE_FUG	Marine Dock Fugitives	CH ₄ (5)	4.94
		CO ₂ e	124
FLAREMSS	MSS Flare	CO ₂ (5)	176
		CH ₄ (5)	0.00
		N ₂ O (5)	0.00
		CO ₂ e	176

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) CO₂ carbon dioxide
 - N₂Ó nitrous oxide
 - CH. methane
 - CO₂e carbon dioxide equivalents based on the following Global Warming Potentials (Effective January 1, 2015): CO₂ (1), N₂O (298), CH₄ (25)
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
- (5) Emission rate is given for informational purposes only and does not constitute enforceable limit.

Date:	November	9	2016
Dutt.	TOVCITIOCI	υ,	2010